State of California Franchise Tax Board

Court Ordered Debt Collections Expansion

Feasibility Study Report FTB FSR 05-01

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TABLE OF CONTENTS

1.0	Executive Project Approval Transmittal	4
2.0	Project Summary Package	4
3.0	Business Case	4
4.0	Baseline Analysis	11
5.0	Proposed Solution	14
6.0	Project Management Plan	35
7.0	Risk Management Plan	43
8.0	Economic Analysis Worksheets (EAWs)	45
Atta	chments	45
Арр	endix 1. Project Criticality Evaluation Factors – Reportable Projects	46
Арр	endix 2. COD Client Particpation Schedule	49
Арр	endix 3. COD Client Particpation Procedures	52
Арр	endix 4. Interface Context Diagram	53
Арр	endix 5. Data Flow Diagram	55
Арр	endix 6. Billing Sub System Data Flow Diagram	56
App	endix 7. Risk Mitigation and Contingency Plan	61

1.0 Executive Project Approval Transmittal

See attached.

2.0 Project Summary Package

See attached.

3.0 Business Case

In August 2004, the Governor signed SB246 (Ch. 380, August 2004). This legislation removed the sunset clause and made the Franchise Tax Board Court Ordered Debt Collections a permanent program. SB246 requires the Franchise Tax Board (FTB) to offer collection services to California Superior Courts and counties statewide.

To comply with the legislative mandate of SB246, this Feasibility Study Report is being submitted for fiscal year 2006/07. FTB must design, develop and implement a collection system able to accommodate statewide estimates up to 8 million cases and nearly 174 clients.

Currently, FTB's Court Ordered Debt (COD) collection program has a case inventory of 1.4M and approximately 36 clients. The existing staffing levels and constrained system cannot accommodate the statewide expansion, as mandated in the legislation. FTB needs additional Information Technology capabilities to support a statewide COD program.

3.1 Business Program Background

In the early 1990's, Franchise Tax Board's (FTB) collection responsibilities were expanded to include certain delinquent non-tax debts. FTB's Non-Tax Debt (NTD) programs allow state and local agencies to benefit from efficient and well-developed tax collection processes with highly integrated information resources and an experienced collection staff.

During 1994, in an effort to reduce the amount of uncollected court imposed delinquencies statewide, AB3343 (Ch. 1242, September 1994) established a partnership between the FTB, superior court, municipal courts, justice courts and counties. As a result of this legislation, FTB created a pilot program: Court Ordered Debt Collections (COD). COD collects court-imposed debts such as delinquent fines, state or local penalties, forfeitures, restitution fines and restitution orders and specified vehicle code violations utilizing the administrative remedies as authorized for Tax Debts. Debts referred to FTB for collection must be at least 90 days delinquent with a total balance due of \$250 in the aggregate.

Subsequent to the initial legislation, SB1106 (Ch. 604, October 1997), SB1310 (Ch. 940, September 2000) and AB2388 (Ch. 776, September 2002) followed; expanding the types of debt available for collections, modifying the collection rate, expanding client participation from the original 9 to 21 counties, including the California Victim Compensation and Government Claims Board (formerly the Board of Control) and extending the sunset date of the pilot program.

SB 1106 extended the sunset date for the pilot program from January 1, 1999 to January 1, 2001. It clarified and expanded the types of debt that FTB could collect and capped the

reimbursement rate at 15 percent of collections. SB1310 extended the sunset date to January 1, 2003 and required a report of the feasibility and advisability of expanding collections to all 58 counties.

The original COD collection system resided on the same LAN-based system as other non-tax debt collection programs. This system, known as the Consolidated Debt Collection System (CDC), was developed in 1993 in response to legislation requiring FTB to collect delinquent child support. The CDC was modified in 1995 to manage the court ordered debt workload. With the continued case volume growth for both the child support and COD programs the system ran the risk of a major failure due to capacity limitations. To address these problems in March 2003, the COD system was converted to an interim mainframe based system and leveraged a 1970's collections application for the billing function. This Court Ordered Debt Collection System was authorized in the COD conversion component of the "Child Support Replacement Project" FSR, DOF Project No. 1730-155.

As a result of the success of the program and with the support of the California Judicial Council, on August 27, 2004, the Governor signed SB246 making COD a permanent program. This bill amends Revenue and Taxation Code Sections 19280 and 19283 and authorizes additional counties or courts to participate in the COD collection program and effectively expands the program statewide. It also authorizes FTB to work in consultation with the Judicial Council to seek additional resources, as needed, to expand.

Since the programs' inception through December 2004, COD has collected over \$186 Million, with a total inventory of 1.4 million cases and provided services for 36 clients, which includes the Victim Compensation & Government Claims Board (see appendix 2 & 3). Statewide participation, to include all 58 counties, is expected to increase the inventory from 1.4 million to approximately 8 million.

Disbursement of funds is based on the type of penalty associated with the delinquency and can vary with the different debt types. Monies dispersed to the State's General Fund can range from 5% to 100% of the amounts collected. (Funds are disbursed according to the State Controller Manual of Accounting and Audit Guidelines for Trial Courts.)
(http://www.sco.ca.gov/ard/manual/cntyman.pdf)

The following table outlines the expansion of the program through May of the 2004/2005 fiscal year:

COD Actual					
Fiscal Year	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005 (to date)
Participating Clients	23	23	26	28	36 to date
Inventory Volume	631,541	803,482	947,754	1,293,605	1,436,761
Collections	\$21,171,926	23,688,006	\$24,066,82 2	\$38,692,583	\$58,570,629
Costs	\$2.19 M	\$2.14 M	\$3.41 M	\$4.27 M	\$4.93 M
CBR	\$9.68 to 1	11.05 to 1	\$7.05 to 1	\$9.05 to 1	\$9.70 to 1
Business PYs	33.8	28.8	27.8	53.8	53.8
IT PYs	2	7	7	7	7

In support of the Department's Strategic Goal #4, FTB can provide collection services effectively and efficiently with minimal cost. Per statute, FTB COD bills its clients for the operating costs of the program or 15% of collections – whichever is less. There is no General Fund cost for FTB to administer the COD program. Because of the administrative remedies and automated processes, FTB is able to maximize collection efforts for its clients and programs as directed by statute. Revenue collected from this program supports numerous county and state funds, i.e. County Special Account, County General Fund, State Restitution Fund, Victims-Witness Assistance Fund, as well as the State General Fund.

3.2 Business Problem or Opportunity

In August 2004, legislation was passed making COD a permanent program and required FTB to offer participation to all courts and counties (clients). This could potentially increase the client base from 36 to over 174 clients and the number of cases on the system by over 500% to approximately eight million, creating billing capability and capacity issues on the current COD system.

In the development of the current interim mainframe system it was originally thought to be the basic infrastructure if the program became permanent. (This was reported to the Assembly on March 28, 2001.) However, in the past two years, maintenance concerns have arisen regarding the architecture design affecting performance of the COD system and the Taxpayer Information System (TI) that reside on the same Adabas environment. The Adabas environment was exclusively designed and implemented in 1993 for the TI system and is currently experiencing contention issues between the two systems based on current capacities.

The business problems associated with the current COD system predominantly occur within 3 distinct areas - Capacity, Security and Functionality. Each area, and its related issues, is outlined as follows:

Capacity

- In order to meet the COD legislative mandates of SB246, an augmentation of business staff and system changes will be needed. Due to the increased volumes of clients, batch processing must be streamlined to fit within the 24-hour window. One batch process currently runs for 4.5 hours. An increase in case volumes as anticipated would cause the batch window to be exceeded on a daily basis.
- 2. The current COD billing sub system is on a separate database from the primary COD collection database, which creates synchronization issues. This leads to significant manual work for the information technology staff maintaining the two databases. This manual work is unacceptable as the number of billings increase due to the additional number of new clients that are envisioned. The billing subsystem is based on a 34-year-old collections billing application with one knowledgeable programming resource to support it. The system is not sophisticated enough to produce multiple levies for a debtor, which contributes to a loss of revenue when a viable source of funds is found and not pursued after the initial levy for further collection activities. Additionally, if the system is unable to produce billings due to unforeseen processing errors, bad data or abnormal terminations, there is a

revenue loss because collection activities cease. The current system consists of software that is not FTB approved for any development project.

Security

 In order to meet the FTB security and privacy requirements of Section 1798.29 of the CA Civil Code (AB700, Ch. 1054, September 2002), a number of system functions will need to be designed and implemented that are not in the current COD System.

Section 1798.29 requires an agency that owns or licenses computerized data that contains personal information to disclose when a breach of security of the system has occurred. A breach of security of the system is defined as "unauthorized acquisition of unencrypted computerized data that would compromise the security, confidentiality or integrity of personal information." The COD system currently does not have the functionality to identify potential breaches of security. An audit logging process that tracks all staff accesses down to the individual case level along with user security levels that restrict access within the system based on authorizations is necessary to bring the COD system in compliance.

In addition, the system must be brought into compliance with Department of Motor Vehicles (DMV) security logging. The current interface process with DMV uses Windows 95. The DMV logon is currently being modified to Windows NT and will no longer support Windows 95. COD must rewrite this function to interface with the new programming accessing DMV. If the COD system is unable to access DMV, it will be less effective in collecting revenue because the interface with DMV provides missing Social Security Numbers for better debtor identification and collection strategies.

The proposed system must meet or exceed prevailing information security requirements as levied on FTB by the State Administrative Manual (SAM), FTB's Information Security Policy (Policy File 9500), and, where applicable, Federal regulations.

Functionality

- 4. The current system lacks a modeling functionality. Modeling functionality will allow COD to stratify or segment accounts that need to be pursued for collection based on past customer characteristics, payment and collection activity. Modeling would determine the necessary actions to effectively collect delinquent accounts. This lack of functionality leads to staff resources being spent on workloads that should not require human intervention and more lucrative accounts being inadequately worked.
- 5. The current process of adding new clients is time consuming and costly. For instance, adding new clients involves a programmer making significant modifications (hard coded rather than table driven) to the system. Given the initial pilot status of the program, the COD system was designed within time and cost constraints, which limited the applications' flexibility and scalability.

- 6. The system does not interface with the FTB Interagency Offset Program. This creates over collections of debts when the courts offset an FTB refund and apply it to an outstanding liability while FTB is also collecting against the same liability. This creates a large manual workload to process refunds to the debtor.
- 7. FTB staff do not have the ability to query live data and create reports. This functionality is critical to effectively managing the COD program. The current reporting process is in a legacy Visual Basic program. One person working full time downloads the data to an Access database for further refinement and reporting to stakeholders. The Access database has reached the limits of data that can be downloaded. Larger caseloads will keep us from preparing reports in this manner so an alternative solution is mandatory.
- 8. Debtors are unable to view account information or make payments via web access. Due to the anticipated call volumes and length of time for each call, web access is vital to partially alleviate the congestion and offer alternatives to debtors who need information on their account or want to pay their liability electronically.

3.3 Business Objectives

- Provide streamlined batch processing to fit within a 24-hour timeframe without jeopardizing the performance of other key IT systems in the department. (Problem Statement #1 - Capacity)
- 2. Provide sufficient capacity and growth to support the estimated 8 million cases. (Problem Statement #2 Capacity)
- 3. Meet the legislative mandates of SB 246 for Court Ordered Debt and Section 1798.29 for Security and Privacy. (Problem Statements #1 and #3 Capacity and Security)
- Provide automated capability to accept referrals from all 58 counties and superior courts by the completion of Phase I – September 2008. (Problem Statements #5 and #6 - Functionality)
- 5. Produce on demand management reports by project's full implementation August 2009. (Problem Statement #7 Functionality).
- 6. Allow debtors the ability to view account information and make payments via the Internet by project's full implementation August 2009. (Problem Statement #8 Functionality)

3.4 Business Functional Requirements

In addition to the current system functionality the new automated system must provide the following functional capabilities:

System Requirement	Definition of Requirement	Consequence If No
	(Inputs, Outputs, Files, Scope of Effort,	Change to existing
	Security Requirements, Interface	system.

	D	
System must contain an audit logging function to meet Security requirements for Section 1798.29. (Business Objective #3)	Requirements) Section 1798.29 requires a state agency to notify a California resident in the event their unencrypted personal information has been acquired by any unauthorized person due to breach of that agency's computer system. A tracking system must be implemented to interface with security audit logging utility program.	Unable to meet the legislative mandate of Section 1798.29.
2.System must have scalable billing and storage capacity for over 8 million cases. (Business Objective #2 &3) 3. System must accept and process referrals from all participating clients. (Business Objective #4)	SB 246 requires FTB to work in consultation with the Judicial Counsel to extend its collection services to all 58 counties. Requires the ability to accept statewide inventory volumes, which include estimates of up to 8M cases. Currently only 20% of the COD client base is participating monthly with an inventory nearing 1.5 million. FTB must have the ability to interface and exchange encrypted data files securely with all participating clients. This includes Superior courts, Victim Compensation and Government Claims Board, and other county collection entities. Statewide client population is estimated at 174. (Table driven format is	Unable to offer collection services to all 58 counties on a daily or weekly basis and comply with the mandate of SB 246. Existing system cannot accommodate the impact of statewide inventory levels. Unable to meet mandate for statewide expansion.
4. System must provide reporting. (Business Objective #5)	Required) COD must have the ability to report data electronically to oversight agencies on a monthly basis. This includes industry standard reporting requirements and statistical data relating to collections, inventory and CBR. COD must have the ability to provide on demand reporting for current as well as historical statistical information.	FTB COD will not meet client-reporting demands. Additional adhoc report requests from overseers and clients will not be able to be met.
5. System must interface with the Interagency Offset Program. (Business Objective #4)	Critical for the COD system to interface with the Interagency offset system. As a result of increased compliance activities, more volumes of offsets are processed and causing over collections of these COD debts.	Over collections will rise, which results in an increased workload in overpayments. This is a very costly workload that impacts numerous client and FTB staff. It places FTB in a vulnerable position as it relates to extreme debtor dissatisfaction with debtors waiting up to 8 weeks for a refund.
6. System must interface with the Employment Development Department (Business Objective #4)	The EDD New Hire Registry provides COD with current employment information. This allows COD to locate employers and issue levies timely and immediately after new employment is secured by the debtor. The Independent Contractor Registry is another available data set to be incorporated into the new system. The information from the registry is processed monthly to match debtors with employers.	Legislative intent is that FTB will pursue these debts using the same administrative remedies available to collect delinquent personal income tax. Without this system functionality, FTB's ability to locate assets timely is greatly diminished and ultimately will reduce revenue for participating clients.
7. System must have the ability to issue multiple levy actions. (Business Objective #4)	The ability to issue additional levies on a recurring basis when prior levies result in no funds or actions by using the same administrative remedies available to collect delinquent personal income tax.	Reduced revenue resulting from the system's inability to issue additional levies when an asset is located.

System must have an archive process to meet FTB Data Retention policy. (Business Objective #2)	FTB policy mandates that accounts will be deleted after a specified period of three or five years depending upon the case criteria.	The current COD system is out of compliance with data retention policies. Account information is not purged or archived.
System must have a reconciliation process with the clients. (Business Objective #5)	Clients must meet the demands of reporting requirements imposed by statute. They must be able to report which cases are with FTB, have been resolved, and/or returned to them for further collection action. Additionally the increased anticipated volumes require a regularly scheduled automated reconciliation process for data integrity between FTB and it's clients.	The current COD system does not have an automated reconciliation processes. FTB is unable to meet client needs as it relates to reconciliation requirements.
10. System must prioritize billing volumes by client. (Business Objective #1)	Must have the ability to control the volume and type of notices issued by client based on mail date, balances and reassess the prioritizations on a regular basis.	Current functionality cannot meet client requests to properly manage monthly billings.
11. System must have an on- demand reconciliation process for payments and disbursements. (Business Objectives #5)	Payment application process must meet the accounting requirements to, at a minimum, balance at fiscal year-end.	Unable to meet the reconciliation requirements as established by the State Controllers Office.
12. System must utilize File Transfer Protocol (FTP) for data exchange with clients. (Business Objective #1)	FTP will be an encrypted data transfer process allowing the clients and COD to exchange case information more frequently than the current monthly process. The program will use the Secured Internet File Transfer System as an enterprise service.	Current process is inefficient, antiquated with delays and misplaced media. Delays can lead to mistakes, over payments, untimely updates and reduced revenue.
13. System must have an automated process to recognize bankruptcy status and process accounts per business rules through an interface with the Enterprise Wide Bankruptcy System (EWBS). (Business Objective #1)	The system must have the functionality to interface with EWBS, to recognize a bankruptcy status on a case, release all involuntary levies and withdraw the account from active status. It must have the ability to update case status on a daily basis.	COD violates the automatic stay per bankruptcy law. Without this system change, the agency is in grave jeopardy of costly litigation.
14. System must have a case transaction history log for each case. (Business Objective #1and #2)	The system needs the ability to report and record all automated and manual transactions on an account or case level. Additionally, to electronically report to the clients all case actions on a periodic basis.	Case history is not currently captured and COD is in violation for client reporting requirements.
15. System must provide the debtor access to his/her account information with the ability to make payments via web access. (Business Objective #6)	Debtor will be able to access their account on the web, make payments, installment agreements and review case balances. This access creates greater efficiencies, reduces operational costs, alleviates call center congestion and uses the Enterprise web service.	Unable to offer best collection practices, provide payment options to debtors and meet state CIO's vision for self-service government.
16. System must have the ability to interface with the Taxpayer Information system (TI). (Business Objective #1)	The system needs the ability to interface with TI on a daily basis in order to match for social security numbers, identify if a debtor is also an FTB employee or confidential, and identify if a debtor is deceased.	The current system has this functionality.
17. System must have the ability to interface with the Industrial Health and Safety (I.H.S.) system (Business Objective #1)	The system needs the ability to interface with I.H.S. on a daily basis in order to identify if a debtor has a higher priority debt in I.H.S.	The current system has this functionality.
18. System must have the ability to interface with the Vehicle Registration Collections (VRC) system. (Business Objective #1)	The system needs the ability to interface with VRC on a daily basis in order to identify if a debtor has a higher priority debt in VRC.	The current system has this functionality.
19. System must have the ability to interface with the Department of	The system needs the ability to interface with DMV on a monthly basis as cases are	The current system has this functionality. However,

Motor Vehicles. (Business Objective #1)	received from clients in order to match for social security numbers.	changes to the enterprise service for DMV Security Logging will eliminate this functionality until the new interface is built.
20. System must have the ability to interface with the Child Support Recovery (CSR) system. (Business Objective #1)	The system needs the ability to interface with CSR on a daily basis in order to identify if a debtor has a higher priority debt in CSR.	The current system has this functionality.
21. System must have the ability to interface with the Disaster Zip Application. (Business Objective #1)	The system needs the ability to interface with the Disaster Zip Application on a daily basis in order to suppress notices being sent to zip codes that have been declared disaster areas for a specified amount of time.	The current system has this functionality.
22. System must have the ability to interface with the FTB Tandem Payment Processing System. (Business Objective #1)	The system needs the ability to interface with the Tandem on a daily basis in order to capture information on payments mailed to FTB and update information on the cases.	The current system has this functionality.
23. System must have the ability to interface with the FTB Payor Files. (Business Objective #1)	The system needs the ability to interface with the Payor files on a daily basis in order to use information about the Payors for billing and case information updates	The current system has this functionality.

4.0 Baseline Analysis

4.1 Current Method

The objective of the COD system has been to collect debts on behalf of clients using administrative remedies available to FTB for tax and non-tax collections as well as being a revenue center for FTB. It currently operates in the mainframe environment and operates across multiple platforms (see appendix 4 & 5). The system currently interfaces with several FTB systems including Taxpayer Information (TI), Enterprise Wide Bankruptcy System (EWBS), Industrial Health and Safety (I.H.S.), Vehicle Registration Collections (VRC) and Child Support Recovery (CSR) along with the Department of Motor Vehicles (DMV) and Employment Development Department (EDD). The DMV and EDD systems operate at the Department of Technology Services (http://www.dts.ca.gov/default.asp). The interfaces obtain information such as active bankruptcies, deceased participants, social security numbers and known addresses on these other systems to accurately identify the participant. Additionally, validations for the priority order of collection activities as well as identification of potential sources of revenue are obtained. The interface with DMV is specifically matching participant names with the DMV database for Social Security Number (SSN) information. The interface with EDD is specifically matching participant names and SSN's with an employer and then updating COD with that information to pursue further collection activities.

New and updated case information is received monthly from each client via various media formats. Remittances are processed by manually keying into the application. The information is updated through batch processes to the appropriate case. The billing subsystem produces thousands of billings and notifications through on demand batch processes each month (see appendix 6). It is an extremely fragile piece based on a 34 year old system with one knowledgeable programming resource to support it. The system creates weekly reports to transmit information to clients regarding remittances received and monthly reports in various media formats, some outdated, for the clients to update their cases.

The current method to query live data and create reports created after implementation, uses unsupported FoxPro and Visual Basic 4 software. The data is downloaded to an Access database and manipulated to create custom reports for each client. The current method requires one full time staff person to create the needed reports for clients and periodically lags behind actual processing by months because of technology constraints.

Payment processing is manually intensive since, many times, they are sent in without the original billing document or an annotation on the payment. Staff in the receiving area spends time researching the payments, creating documents for data entry input and then keying the information into the system. The current billing system cannot accommodate Optical Character Recognition (OCR) or scanning functionality because of the technology necessary to incorporate those features. This rewrite would position COD for the future addition of more automated payment processing options, e.g. OCR. It will allow for real time information on the system, save time and PY's along with allowing other payment options on the web feature.

4.2 Technical Environment

FTB has a growing enterprise network consisting of various servers, printers, TN3270 connections over Ethernet, mainframe systems, and UNIX systems. Most of the LANs function as office automation application servers; however, the department also has special-purpose LANs for imaging, voiced response, and electronic correspondence functions.

Consistent with the FTB's technology vision as expressed in the Agency Information Management Strategy (AIMS), FTB's information technology is not relegated to a specific environment.

4.2.1 Existing Infrastructure

FTB's current infrastructure consists of:

Mainframe Infrastructure

FTB's business processes are supported by a full service data center. The data center processes approximately 49 million online transactions/month and over 120 thousand batch processes/month during peak. The data center also generated over 3 million print pages/month for notices, bills and letters during peak. FTB supports electronic transmission of 1099 and related data using web technology on the e-Server (mainframe). The programs administered by the FTB contribute over 61% of the General Fund Revenue.

Data center customers and users include all of FTB's program areas, including Personal Income Tax (PIT), Corporate Income Tax, Homeowner & Renter Assistance (HRA), and various non-Tax debt collections programs. FTB's data center also provides data storage and processing service to a number of external customers such as Board of Equalization, EDD, Department of Food and Agriculture, etc.

The FTB's current mainframe consists of the IBM Z900 E-Server / 2064-1C3 with a minimum capacity of 662 usable MIPS, 24 GB processor memory and 165 ESCON attached channels. The Direct Access Storage Device (DASD) has 2.9 Terabytes of RAID-5 storage to support all major Tax Program areas including access to on-line databases utilizing ADABAS, DB2, and

VSAM files. Furthermore, Open Systems DASD has 2.5 Terabytes for Exchange database and on-line backup requirements. There is also an Automated Cartridge System (ACS) that supports twenty-four 3490 and twenty 3590 devices with a Tape cell capacity of 35,000 internal slots.

Network Infrastructure

The Local Area Network (LAN) at FTB's campus is the heart of the enterprise network. There are nearly 6,000 clients supported on the network. Network users have access to the various system applications via infrastructure devices such as routers, switches, hubs and the mainframe Open Standard Adapters. The current enterprise network topology incorporates over 100 Gigabit Ethernet data switches and primarily uses the TCP/IP protocol suite. The campus topology follows a three-tier enterprise model. This model consists of three distinct functional layers: core, distribution and access. The fastest layer is the Ten Gigabit Ethernet switched backbone network core, which redundantly interconnects the distribution layer switches in Buildings 1, 2, and 3. The distribution layer switches connect to over 80 access layer switches, which terminate to workstations and other network end devices. Additionally, there are a total of three server farm switch environments that provide fault tolerance to the enterprise servers. This network design provides significant advantages, including very high reliability, scalability and manageability.

The Wide Area Network incorporates redundant and encrypted frame relay communication links to the In and Out of State field offices. The remote environments incorporate a mixture of over 40 data switched Ethernet hubs for their local network communications.

The Metropolitan Area Network is comprised of the Micron, International Drive, Sun Centers I, and II suites. They connect to the LAN campus via Asynchronous Transfer Mode (ATM) over Synchronous Optical Network (SONET) at OC-3 speed with a combination of shared and switched technology, 10baseT and 100baseT.

The wide area network, comprised of 16 in-state offices and four out-of-state offices, is connected to the LAN by frame relay at rates ranging up to T-1 speeds. The field offices are shared 10BaseT to the desktop. There are a total of 30 routers on the local, metropolitan, and wide area networks. The network infrastructure also has several network management systems for monitoring critical network devices. Concord Network Health is one of the network monitoring tools specifically designed for generating user-friendly performance and usage reports. Cisco Works for Switched Internetworks is also used to monitor and provide alert type notification of network device outages. Furthermore, there are a number of additional tools used to proactively monitor and manage the network.

Distributed Environment

The FTB has a large distributed computing environment attached to its enterprise network consisting of approximately 350 NT servers, and an estimated 50 UNIX servers. This distributed environment consists of large client/server applications, smaller LAN-based applications, and office automation including electronic mail. UNIX servers provide the primary platform for database and applications services required to support the department's large client/server applications, while Windows servers are used to support the small LAN applications and office automation.

UNIX servers primarily include IBM SP/2, IBM RS/6000, and HP 9000. Database Management systems on these UNIX servers include Sybase ASE and IBM UDB2. On-line applications are primarily written using PowerBuilder or Java. Batch applications are primarily written in COBOL or C.

Windows servers are primarily Dell and Compaq, running Windows 2000 and under Active Directory Services. Microsoft SQL Server is the primary DBMS on these servers. Applications accessing these servers are primarily written using Visual Basic or Microsoft Active Server Pages.

Backups for the Distributed systems primarily are captured by one of two automated tape libraries. The TSM backup has capacity of 120TB of tape space, and the Legato backup system has a capacity of 143 TB of tape capacity.

5.0 Proposed Solution

The proposed solution is a FTB development effort incorporating contracted technical assistance. This solution best satisfies our defined objectives and functional requirements of expanding to additional clients and mitigating the security risks and batch window problem as early as possible in the timeline of the project. FTB expects the proposed solution to generate revenue for our clients by enlarging COD's collection capabilities; through increased inventory management and through augmented program staff to support the increased statewide caseload. Utilizing a phased approach, each of these phases is sequential and mandatory since each component builds upon the previous one with required functionality, although the design will overlap in order to build the proper infrastructure in Phase 1 for the subsequent phases.

The 3 phases are outlined as follows:

Phase 1

- Database Design and Implementation
- Current Functionality
- Intelligent Case Modeling
- Security Requirements

Phase 2

Best Practices Collection Functionality

Phase 3

- External Reporting
- Debtor Web Access

The proposed solution is to replace the database with a modern relational database in DB2 and replace the on-line application with a Java web browser interface in Phase 1. The solution components are:

- 1. Replace databases with a relational database
- 2. Replace on-line application with web based application

- 3. Modify current COBOL batch processes
- 4. Integrate with enterprise security applications and tools

The existing COBOL batch programs will be modified for re-use. This will more closely integrate on-line and batch functionality with more flexible programming languages. This approach would be completed in Phase 1 and Phase 2. FTB plans to leverage existing information technology staff knowledgeable of the COD system combined with information technology contractor support to provide additional technical and project expertise. After implementation, FTB will continue ongoing system maintenance.

This technology solution will leverage the already existing mainframe and management reporting hardware infrastructures. It will leverage existing software as well as software change management, update the language from Natural to Java, restructure the database from Adabas to DB2 and minimize the risk of supporting these outdated technologies that will reach capacity constraints with the potential client base. It will also leverage the Security Audit Logging (SAL) utility program, DMV security logging, and the Secured Internet File Transfer (SIFT) technology that are enterprise wide solutions for FTB rather than building these utilities individually for this specific system.

During Phase 1, a new database in DB2 will be designed and built, 12 batch processes and 5 billing processes will be rewritten to include fiscal reconciliation, remove screen scraping of DMV data, legacy printing and faxination, and replace manual processing. The payment and on-line processing will include real time updates for more efficient collection activities. Additional batch processes will be designed and written to accommodate the future web access, installment agreements, payment processing, data conversion and a data retention policy. Intelligent case modeling functionality will be developed. Intelligent case modeling is a form of case selection based on case dollar amount or ability of collections (for example, a participant with an employer has more potential for payment than a participant who is unemployed).

Phase 2 will add the functionality for sending sequenced notices to the same financial institution for the same participant, add stricter edits of case acceptance for greater return on investment, incorporate a rolling schedule of media exchange with the clients to decrease peaks and valleys of activity within a month, add the ability to monitor the amount of notices sent out by client to accommodate their call center capabilities, and recapture the on-line functionality with the Graphical User Interface (GUI) that was not incorporated in the interim system.

Phase 3 will integrate external reporting requirements to clients and their oversight agencies utilizing the new database and create a web based debtor access screen. The access screen will allow debtors to view balance information and provide electronic payment options including an installment agreement feature. Due to the anticipated call volumes and length of time for each call, web access is vital to partially alleviate the congestion and offer alternatives to debtors for account information and payment options.

5.1 Solution Description:

1. Hardware: The proposed solution will utilize the existing mainframe and server infrastructure already in place. Additional mainframe storage will be acquired to support the increased volumes.

Item	Number	Total Amount	Usage
CD/DVD Writers	2	\$539	File Transfer, Storage
CD/DVD Supplies		\$1,616	File Transfer
Printer	1	\$2,694	CSB COD Project Staff
Workstation Memory	8	\$8,361	CSB COD Project Staff
Expansion and Monitors			
Server Upgrade	1	\$2,155	Network
Consultant Workstations	18	\$122,770	CSB COD Project Staff
Technical Manuals		\$2,155	Testers, Developers
Tapes	800	\$10,988	Storage, Interface
DASD	10 disk	\$27,300	Mainframe Storage
	packs		
	(22.1		
	gigs)		
Digital Sender	1	\$3,200	COD Project Staff
Total		\$181,778	

2. Software: The proposed solution will utilize the existing software already in place at FTB. Additional individual software licensing will be required for the development, contract, and analytical staff.

Item	Number	Total Amount	Usage
	of		G
	Licenses		
MS Project Licenses	10	\$3,771	CSB COD Project Staff
B-Liner Licenses	3	\$485	Mainframe Developers
Websphere Studio	3	\$12,930	Computing Resource
Active Developer			Bureau
Tivoli Omegamon XE	1	\$102,000	Computing Resource
for WAS			Bureau
WSAD/RAD license and	2	\$10,000	Computing Resource
maintenance			Bureau
ISPW license	1	\$500	Computing Resource
			Bureau
DB2 Connect and	1	\$500	Computing Resource
maintenance			Bureau
Crystal Report Server	1	\$8,081	Computing Resource
XI			Bureau
Crystal Report	5	\$3,206	Computing Resource
Developer License			Bureau
Standard Support	1	\$1,832	Computing Resource
(Crystal Server)			Bureau
DB2 Connect	4	\$2,000	Developers
(Developers)			
Total		\$145,305	

- **3. Technical platform**: The COD system will be rewritten using Java for the presentation layer and DB2 as the relational database. Cobol will be used for the batch processing.
- 4. Development approach: A core team will be created comprised of in-house staff with the expertise to identify complete business requirements, interface points and system changes to accommodate existing functionality as well as required enhancements. Existing COD staff with experience maintaining the current system will be leveraged. The core team members along with contractor staff will work with key members from affected stakeholders to identify their system changes, develop requirements, code system, system test, and implement the business solution in a phased approach. The Project Manager will coordinate all of the teams through implementation (see 5.1.9 Resource Requirements for additional descriptions of team members skill sets).
- 5. **Integration issues:** The proposed COD Expansion will exchange data with external and internal systems and data sources similar to the current system (see 5.1.7 Technical Interfaces for existing interfaces). The technical manager is responsible for ensuring smooth integration among the systems with COD.

- 6. **Procurement approach:** This project will require 5 procurements. Each of these procurements will be completed through competitive bid processes such as CMAS (Request for Offer process), MSA, or through a Request for Quote (RFQ).
 - Project Oversight and Validation
 - Hardware
 - Workstations
 - Software
 - Technical Consultant(s)

An Information Technology Procurement Plan (ITPP) will be prepared and submitted to the Department of General Services for review and approval prior to conducting any procurements associated with this project. The ITPP will describe the overall strategy necessary to accomplish and manage the acquisitions required for this project by formally documenting that the proposed approach for the acquisition satisfies state requirements. The ITPP will serve as a reference document and become a permanent record of acquisition decisions.

See Project Schedule (section 6.5.5) for Key Procurement Milestones/Tasks.

- **7. Technical interfaces**: The existing technical interfaces will be utilized with necessary modifications for the following systems (see appendix 4):
 - FTB Taxpayer Information (TI)
 - Enterprise Wide Bankruptcy System (EWBS)
 - Industrial Health and Safety (IHS)
 - Vehicle Registration Collections (VRC)
 - EDD New Employee Registry (NER)
 - Department of Motor Vehicles (DMV)
 - DCSS Child Support Recovery (CSR)
 - Courts/Counties
 - FTB Disaster Zip Application
 - FTB Tandem payment processing
 - FTB Payor files

Additional technical interfaces will be constructed for the following systems:

- EDD Independent Contractor Registry (ICR)
- FTB Interagency Offset Program

To mitigate any significant issues, interfaces will be developed using the following methodology:

 FTB will work with the external agencies or internal FTB sections to develop secure interfaces.

- A plan for each interface will be developed which will include interface requirements, record layouts including all data elements, interface procedures, testing and implementation.
- **8. Testing plan:** The project's testing plan will provide a detailed description and outline of activities required for preparing and executing the system changes across multiple systems. The testing phases will include unit, interface, system, and acceptance tests. The test process verifies the adherence to the application design in accordance with the business requirements. The objectives of the test strategy are to validate business functionality, verify usability, architectural integrity, internal interface processes, and validate project phase compatibility.

9. Resource Requirements:

	FY	2005/06	FY	2006/07	FY	2007/08	FY	2008/09	FY	2009/10	FY	2010/11	то	TALS
PROJECT RESOURCES	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
Redirected Resources	3.5	317,964	0.7	67,754	1.3	118,347	3.3	308,533	7.4	598,053	7.3	590,329	23.5	2,008,605
One-Time Project Activities	3.5	317,964	17.8	3,066,113	17.8	5,198,223	8.2	4,133,323	1.5	404,930	0.0	0	48.8	13,120,553
Continuing Project (Ongoing) Activities	0.0	0	1.0	81,021	1.2	112,226	13.2	1,159,285	21.6	1,862,954	22.5	1,952,164	59.5	5,167,649
PROGRAM RESOURCES														
Redirected Resources	53.3	4,882,229	53.8	4,927,516	53.7	4,932,516	53.8	4,932,516	53.8	4,932,516	53.8	4,932,516	322.2	29,534,809
Continuing Program (Ongoing) Activities	53.3	4,882,229	65.3	5,695,911	65.3	5,661,325	153.6	11,615,152	153.6	11,615,152	153.6	11,615,152	644.7	51,084,921

The COD Project will be staffed with a mixture of state staff and contractor staff. The state staff will fill several support, development, and program area roles. Contractor staff will be brought on board during various steps in the development process. The following describes the expected skill sets needed for staffing the COD project.

State Staff

<u>Java Developer</u>: State staff would code the Java web application from the design and correct any identified defects.

<u>Cobol Developer:</u> State staff would code the Cobol batch application from the design and correct any identified defects.

<u>Business Analyst</u>: State staff will work with the business customers to obtain and document requirements; provide input on project scope, objectives, and deliverables; provide direction and information for data retention and data scrubbing activities prior to implementation.

<u>Test Analyst</u>: State staff would create test scripts, coordinate testing with developer staff to identify and correct defects.

<u>Supervision</u>: Develop approach/recommendation to meet the business requirements, which includes the development of the new system and on-going maintenance thereafter; oversight of state and contractor staff for personnel related items; and provide status reporting to stakeholders.

<u>Business Staff</u>: Responsible for call center activities, client implementation, collections, payment processing, and support activities.

Contracting Staff (Total – Approximately 67,000 Hours)

<u>Java/Websphere/IBM Architect:</u> This contractor would be very knowledgeable in the IBM Websphere environment and understand both Java and Cobol. The task of this contractor is to evaluate our current environment and the COD requirements, and work with FTB staff to develop architecture for the COD project along with knowledge transfer to FTB staff.

<u>Web Application (Java) Analyst:</u> This contractor would work on gathering requirements from the users for the web application, produce a requirements document and provide knowledge transfer to FTB staff.

<u>Batch Application (Cobol) Analyst:</u> This contractor would work on gathering requirements from the users for the batch intake application, produce a requirements document and provide knowledge transfer to FTB staff.

<u>Batch Billing Application (Cobol) Analyst:</u> This contractor would work on gathering requirements from the users for the batch billing application. This contractor should have knowledge of billing systems, produce a requirements document and provide knowledge transfer to FTB staff.

<u>Java Developer/Designer:</u> This contractor would work on the design of the web application. This contractor should have knowledge of security on the mainframe using TopSecret, Websphere and Java. The contractor would produce a design document and provide knowledge transfer to FTB staff.

<u>Cobol Developer/Designer:</u> This contractor would work on the design of the web application, produce a design document and provide knowledge transfer to FTB staff. <u>DB2 Database Developer/Designer:</u> This contractor would work on the database design, produce ERD, Data Dictionary and logical/physical models and provide knowledge transfer to FTB staff.

<u>Java Programmer:</u> This contractor would work on coding the Java web application from the design, correcting identified defects, and provide knowledge transfer to FTB staff. <u>Cobol Programmer:</u> This contractor would work on coding the Cobol batch application, correcting identified defects and provide knowledge transfer to FTB staff.

<u>Web Application Tester:</u> This contractor would work on creating the test cases and scripts, run the tests and produce a report on results. This contractor should also be able to test the application's performance, optimize performance and provide knowledge transfer to FTB staff.

<u>Batch Application Tester:</u> This contractor would work on creating the test cases and scripts, run the tests and produce a report on results. This contractor should also be able to test the application's performance, optimize performance and provide knowledge transfer to FTB staff.

<u>Technical Writer:</u> This contractor would help in writing the above requirements, design documents and provide knowledge transfer to FTB staff.

10. Training plan: A training team will be responsible for developing and conducting user training. Depending upon the role of the participant, an appropriate level of training will be provided (e.g., classroom, on-line, PowerPoint, etc.). The training team will also ensure that appropriate on-line help screens and/or user manuals are provided to assist users.

Additionally, the technical information technology staff will require formal classroom training for software development, database and network administration. They will be responsible for complete documentation of the system programs for both batch and online processing to provide a foundation for future maintenance and enhancements of the system.

Contractor staff will be responsible for knowledge transfer to state staff.

- **11.Ongoing maintenance:** After implementation, 22.5 PYs (\$1.95 million) will provide ongoing system maintenance.
- 12. Information security: To ensure data integrity, data security, architectural security, and confidentiality of data, the project team will work closely with Privacy, Security, and Disclosure Bureau staff to ensure compliance with departmental security policy, standards, guidelines, and protocols. The proposed solution will include FTB's Security audit log requirements as described in the department's Information Security Policy Manual (ISPM) and, where applicable, the IRS Publication 1075. The mainframe security for the application files, the web application server and DB2 will use eTrust CATop Secret that controls user access to mainframe resources. The Security Audit

Logging (SAL) utility program is an enterprise service used for audit logging. The DMV data access is an enterprise service that uses a secure leased line from FTB to DMV. The Secured Internet File Transfer (SIFT) system is an enterprise service that will use Tumbleweed Secure Transport Server. SecureTransport will transfer files via secure FTP (FTP/SSL) protocol, encrypt all files transferred, and provide signed MDN receipts for all transfers made. The Internet Web Pay service for the electronic payment options uses 128-bit SSL encryption. Each of these are enterprise wide solutions for FTB rather than building these utilities individually for this specific system.

Newly developed systems and functional changes to existing systems require security re-certification prior to implementation. To ensure no unintended negative consequences were introduced during system changes, the FTB's Compliance Monitoring Unit will perform a complete system vulnerability scan. Identified deficiencies will be corrected prior to production migration.

- **13. Confidentiality:** The project team will work with the Privacy, Security, and Disclosure Bureau to ensure departmental security guidelines are followed in regard to confidential employee information. FTB staff will only have access to data for which they have a true business need and their access level to the data will be controlled by their role(s) within the system.
- 14.Impact on end users: The proposed solution will improve customer service to clients, the public, and FTB staff. All FTB business users impacted by the system will receive training on any modifications to the existing functionality and new graphical user interfaces and enhancements. A communication plan will be developed to provide project information to internal FTB and external stakeholders. In addition, this plan will include methods to facilitate change acceptance. A client participation schedule has been developed and will be refined as phase 1 implementation is migrated (appendix 2).
- 15.Impact on existing system: Maintenance will continue on the current COD system until Phase 1 is completed. Once the expanded system is implemented, all court ordered debt cases meeting conversion criteria will be migrated to the new system. A detailed conversion plan will be developed and executed as part of this project. Business criteria for case conversion will be developed and will include compliance with department data retention policies. This plan will also include the deletion of the old system and data not meeting the conversion and data retention criteria.
- 16. Consistency with overall strategies: The proposed solution meets the business goals and objectives of FTB's Strategic Plan 2003- 2007: Goal #4, Deliver Efficient and High Quality Business Results and Goal #5, Protect Taxpayer Privacy and Ensure Security of Taxpayer Information. The proposed solution also meets the strategic goals of the California State Information Technology Strategic Plan 2005-2009: Goal #1, Make Services More accessible to citizens and State clients; Goal #2, Implement common business applications and systems to improve efficiency and cost effectiveness; Goal #3, Ensure State technology systems are secure and privacy is protected; and Goal #4, Lower costs and improve security, reliability and performance of the State's IT infrastructure.

- **17. Impact on current infrastructure:** The current network infrastructure and distributed environment will not be impacted. The mainframe infrastructure will be impacted. The removal of COD from the Adabas database will improve the reliability and batch processing for TI, which supports the primary mission of FTB. This will extend the limited time period that TI can fit in its current Adabas infrastructure.
- **18**. **Impact on data centers:** The system will continue to interface with systems operating at the Department of Technology Services. There will be no impact to this data center.
- 19. Data center consolidation: Not Applicable
- **20. Backup and operational recovery plan (ORP)**: FTB's Business Impact Assessment (BIA) defines the cashiering portion of Court Ordered Debt as a tier 1 recovery priority with a Recovery Time Objective (RTO) of 2 days. The customer service portion of COD is defined as a tier 3 recovery priority with an RTO of 8 or more days.

Business resumption plans are in place for each of these business applications, which will not require significant changes as a result of this project. However, the system changes included in this proposal will result in additional data collected; minor changes will be required to the current data backup routines to accommodate the growth in size. The additional data will be included in the current data backups, which are performed on a daily basis for the COD application. The data backups are kept in a storage vault located near FTB's data center. Once a week, a full set of backups are sent off-site utilizing an off-site storage vendor managed by the Computing Resources Bureau (CRB). The off-site backups are rotated weekly and a minimum of two generations of backups are off-site at any given time.

- **21. Public access:** Phase 1 and 2 will not include public access. Any exchange of data between FTB and the Courts/Counties that occur electronically, including over the Internet, will be privileged and unavailable to public access. Phase 3 will allow secure debtor access to limited account information and payment options.
- **22.Costs and benefits:** See Section 8.0, EAWs, for cost detail. One-time cost: \$13,120,553 for hardware, software, limited term, temporary help, contract services and 48.8 PYs.

On-going Maintenance and Operations Cost: \$1,952,164 for hardware/software maintenance and 22.5 PYs.

Total On-going Program Cost: \$11,615,152 (153.6 PYs)

Projected Revenue: \$17.6 million in increased revenue for FY 06/07; \$17.6 million in FY 07/08; \$72.4 million in FY 08/09; and \$72.4 million in FY 09/10 and on going.

23. Sources of funding: Budget Change Proposal (BCP). In FY 05/06, FY 06/07, FY 07/08, FY 08/09, FY 09/10 and FY 10/11 Staff Cost for 3.5 PYs, 0.7 PY, 1.3 PY, 3.3 PYs, 7.4 PYs and 7.3 PYs respectively will be redirected from within the department for development activities.

Budget Augmentations by BCP for FY 06/07, FY 07/08 and FY 08/09 will be submitted for hardware, software, limited term positions and contract services.

In FY 2010/11, a BCP will be submitted for continuing IT activities and program costs.

There is no General Fund cost for FTB to administer the COD program. COD is funded at a reimbursement rate of 15%, or the cost of collections whichever is less. The project expenses are paid each fiscal year they are incurred.

	Baseline FY 04/05	Projected FY 05/06	Projected FY 06/07	Projected FY 07/08	Projected FY 08/09 & Ongoing
Beginning Inventory	1,198,501	1,459,000	1,459,000	1,719,000	1,719,000
Accepted Cases	368,924	0	368,000	201,000	1,826,000
Cases Withdrawn	(108,591)	0	(108,000)	(201,000)	(678,000)
Ending Inventory	1,458,834	1,459,000	1,719,000	1,719,000	2,867,000
Collection Actions:					
Demands	290,549	291,000	364,000	364,000	684,400
Bank Levies (includes misc.)	33,449	33,000	41,000	41,000	78,350
Wage Levies	616,207	616,000	770,000	770,000	1,445,050
Total Collection Actions	940,205	940,000	1,175,000	1,175,000	2,211,800
Revenue:	44.000 =0.4	44.000.000	44.505.000	44.505.000	04.004.000
Demands Bank Levies (includes misc.)	11,226,794 2,552,430	11,200,000 2,600,000	14,587,000 3,242,000	14,587,000 3,242,000	24,021,000 5,543,000
Wage Levies	44,480,471	44,500,000	56,729,000	56,729,000	95,269,000
County Payments	5,103,390	5,100,000	6,483,000	6,483,000	10,928,000
Total Revenue	\$ 63,363,085	\$ 63,400,000	\$ 81,041,000	\$ 81,041,000	\$ 135,761,000
Increased Revenue			\$ 17,641,000	\$ 17,641,000	\$ 72,361,000
15% Admin Limitations	1		\$ 12,156,150	\$ 12,156,150	\$ 20,364,150
Total Alternative Project	Costs		\$ 9,626,211	\$ 11,684,159	\$ 17,466,954
Difference Between Adn	nin Limitations & Pr	oject Costs	\$ 2,529,939	\$ 471,991	\$ 2,897,196

I1 Limited by DOF Budget authorization-Currently at \$5.75 million for FY 2004/05 which equates to approx. 9%

5.2 Rationale for Selection:

The proposed Court Ordered Debt Expansion Project solution was selected because of its cost effectiveness and time constraints. This solution was significantly less expensive then a Commercial Off the Shelf software product and best met the legislative mandate of expanding statewide by providing, in the least amount of time, the capacity for current clients to add additional accounts and new clients the ability to participate. It will allow FTB to continue to provide collection services effectively and efficiently with minimal cost. Per statute, FTB COD bills its clients for the operating/administrative costs of the program or 15% of collections – whichever is

less. The project expenses each fiscal year will stay within the 15% operating / administrative limitation costs.

In addition, the proposed solution was selected because the current Adabas configuration constrains FTB's ability to rewrite the current system and support it for any length of time. In fact, it will shorten the amount of time COD or TI can remain on the same database because of technical considerations through the use of home grown file management tools, restrictions in file numbers available and the batch processing contention currently being experienced.

The proposed solution will be compatible with the direction of strategic enterprise systems within the department as well as the California State Information Technology Plan for 2005-2009. It will be designed to be open, flexible and scaleable, with the ability to allow for the addition of new technologies as they become available.

The alternative best satisfies the objectives and requirements, compared to the other alternatives considered, for the following reasons:

- Complies with the legislative, security and privacy requirements
- Existing reporting systems will be leveraged to incorporate COD, which will streamline development effort and minimize software and hardware costs since a DB2 relational database is less labor intensive than multiple data bases currently supported
- The most cost effective solution from a long term resource and technology viewpoint
- The most secure transmission model to exchange data with the courts and counties
- Supports more timely data exchanges and the currency of the data for COD system and the courts and counties
- Integrates the disparate billing and on-line subsystems into an integrated, robust, user-friendly, real time collection system
- Complies with FTB's strategic vision, enterprise technology architecture and enterprise application architecture
- Provides COD business users with better and more current access to data at their fingertips
- A modern relational database is easier to administer, maintain and recruit knowledgeable staff for support
- Batch processes will be written in one language resulting in a less complex system to maintain
- Java and DB2 are commonly used, contractors are readily available
- DB2 and Java are much more compatible than DB2 and Natural
- Java and DB2 are mainstream and will be viable for the foreseeable future
- Provide a foundational architecture (Java) and skill set for future application efforts at FTB
- Allows debtors access to account information and payment options via web access

5.3 Other Alternatives Considered

Alternative 1

Enhance the current COD system to one database and language integrating the functionality of the current external Visual Basic and FoxPro applications through a FTB development effort.

Alternative 2

Implement a Commercial Off the Shelf product, with significant modifications, capable of supporting the collection activity of a statewide Court Ordered Debt program.

Alternative 3

Implement a Commercial Off the Shelf product, with significant modifications, capable of supporting the collection activity of all debt types within the Non Tax Debt Collection section of the Franchise Tax Board.

Alternative 4

Implement a FTB developed system capable of supporting the collection activity of all debt types within the Non Tax Debt Collection section of the Franchise Tax Board.

Alternative 5

Utilize the existing tax program's Accounts Receivable Collection System (ARCS) for the Court Ordered Debt collection program.

5.3.1. Describing Alternatives

Alternative 1: Enhancement of the current COD system to one database and language integrating the functionality of the current external Visual Basic and FoxPro applications through a FTB development effort.

In the development of the interim mainframe system it was originally thought to be the basic infrastructure if the program became permanent. Given the provisional nature of the COD collection program at FTB, the application development project was justifiably cost constrained. As an interim solution, the application wasn't designed to be as scaleable nor as flexible as current and future business needs dictate.

FTB technical experts have reviewed the current COD application and have determined that there are considerable design issues with the database structure and the billing batch jobs. Additionally, the system is out of compliance with FTB's security standards. From a technical perspective these design and security flaws necessitate a re-write of

the entire application. It should also be noted that significant business process reengineering efforts are anticipated to modify the current application's functionality.

FTB's Adabas environment has been substantially configured to suit the unique technical requirements of the Taxpayer Information (TI) application. The TI application is the accounts receivable and filing system for the personal income tax returns for the State of California. This system sustains one of the primary functions of the Franchise Tax Board by administering California's personal income tax system. The COD application currently exists in one of TI's physical databases for active accounts, requiring COD to compete for resources with TI as well as E-Filing and Amnesty and is very limited because of the TI configuration and resource needs. Maintenance concerns have arisen over the past two years regarding this architecture design affecting performance of the COD system and TI. Both systems are currently experiencing contention issues between them based on current capacities.

During the 2004 income tax return filing season, the TI system did not complete batch processing in a timely manner on 3 separate occasions because of a lack of mainframe processing capacity. In these cases, TI took priority and the decision was made to halt COD batch processing. Because of the seriousness of these contention issues, the current COD application is routinely required to reduce volumes and processing requirements to maintain mainframe capacity for the TI system. This continual limitation of the COD system on the Adabas infrastructure will result in lost interest revenue to our clients and to the State.

As the capacity continues to climb for TI, COD, and E-Filing the files will be completely used within 10 years. Any rewrites in Adabas will use up the files within 3 years. There is no ability to add to the number of files. This is because of the technical configuration based on a profile system managed by an internally written program that is not supported.

Industry support of Adabas, the design and configuration of FTB's Adabas environment, and FTB's Enterprise Technical Architecture policy all weighed heavily in the decision not to build new Adabas applications.

Industry support of Adabas can only be characterized as limited. For instance, the current system is using "Com-plete" as a transaction monitor for Adabas. There are only 300 Com-plete sites in the world. In general, clients must extend their investments into Software AG's product line to easily extend application functionality, such as the ability to push web functionality. FTB has no experience with webifying Adabas based applications, however we do have experience with the Java / DB2 architecture with the implementation of the Integrated Non-filer Compliance application.

Adabas is not a mainstream solution, as defined by FTB's Enterprise Technical Architecture policy. FTB's direction is to standardize toolsets and associated skillsets and has defined DB2 and MS SQL as enterprise standards. This move towards an enterprise architecture is consistent with Objective 10 (Adopt a Statewide Enterprise Architecture Methodology and Technology Standards) in the California IT Strategic Plan.

In addition to the Adabas contention issues, it should be noted that the Natural programming language will also prove to be a future limitation. The Natural programming language blends data access, business rules and the presentation layer. This makes re-use of code more difficult for future development efforts.

The cost to move towards an Adabas solution is similar to the cost of the Java / DB2 solution. However, the seriousness of the contention issues with the TI system - FTB's primary business function of tax administration, necessitates the decision to declare this alternative as impractical.

<u>Advantages</u>

- 1. Familiarity of technical and business staff with the current system
- 2. Supports more timely data exchanges with the courts and increased volumes

Disadvantages

- 1. Minimal reusability of existing program code, batch processes and interfaces
- 2. Significant effort to retrofit the system to meet security and privacy requirements
- 3. Significant effort to add in required enhancements to accommodate the increased volumes
- 4. Continuing use of legacy programming that is becoming harder to support as programming staff retire.
- 5. The Adabas file structure does not allow for an easy means to perform on-demand queries.
- 6. There is a limit to the number of lines of code that can be contained in a Natural program. The most complex programming has to be split into a variety of programs, adding to maintenance efforts.
- 7. The Natural programming language blends data access, business rules and the presentation layer. This makes the re-use of code more difficult for future development efforts in support of other non-tax debt types/programs.
- 8. The project costs for this alternative will exceed the 15% operating/administrative limitation based on the revenue generated. The additional costs would require the courts (legislation) to approve exceeding the current statute.

Costing

Costing was completed for this alternative (see attached EAWs).

Alternative 2: Implement a Commercial Off the Shelf product, with significant modifications, capable of supporting the collection activity of a statewide Court Ordered Debt program.

As with most application development projects, the Court Ordered Debt system being proposed requires a unique solution to a complex business problem. Although commercial venues have been explored, a "shrink-wrapped" system will not provide the flexibility needed to support the complex nature of the system's requirements without significant customization. The Information Technology staff has in-depth knowledge of

the business processes of FTB, their clients and the interactions with all the external clients that can be leveraged to develop a system to meet those complex requirements. The legislation mandating that FTB add additional caseload, coupled with the stakeholder's direction to add clients as quickly as possible, has affected various aspects of the project, necessitating a phased approach.

FTB has a successful track record for implementing commercial off the shelf (COTS) solutions. However, FTB implementations of COTS solutions have required significant customization to accommodate our business and legislative needs. For instance, the Accounts Receivable Collection System (ARCS) (DOF # 1730-126) project required \$25 million in contractor services and \$9 million for state staff in order to modify and implement the \$1 million base system. These modifications have made ARCS an extremely complex application, crossing multiple platforms, geared towards the collection of tax debts. As a result of the customization, it is not feasible to use ARCS for COD.

A market analysis was conducted (Request for Information - RFI process) of commercial off the shelf (COTS) solutions. None of the solutions were deemed cost effective due to the high degree of customization that would be required and the significantly higher implementation cost. Additionally, time frames would have to be extended to complete the customization of the base system and the business processes, which does not meet the needs of our customers and would have an adverse impact on future revenue.

Given the short time frames and potential customization costs of a COTS implementation, a FTB development effort is deemed to be the most effective development model for the COD system.

Advantages

- 1. Lower risk to the State because the contractor administers the modification and development/customization of the product.
- 2. Alternative procurement could be pursued thus deferring development costs into the out years.
- 3. Supports more timely data exchanges with the courts and increased volumes.

Disadvantages

- 1. Procurement lead-time for this solution would negatively impact the ability to increase revenue as quickly as the selected solution. Each year of delay would mean lost revenue of approximately \$16 million dollars.
- 2. In spite of customization, there is potential for a product that does not completely meet the needs of the customers.
- 3. Customized COTS are usually not eligible for upgrades of the core product.
- 4. In the cases where upgrades are possible, substantial maintenance expenditures are required which risk the existing code base.
- 5. Inability to reuse existing program code, batch processes and interfaces.
- 6. The project costs for this alternative will exceed the 15% operating/administrative limitation based on the revenue generated. The additional costs would require the courts (legislation) to approve exceeding the current statute

Costing

Costing was completed for this alternative (see attached EAWs). The cost for this alternative was significantly higher than the recommended solution.

Alternative 3: Implement a Commercial Off the Shelf product, with modifications, capable of supporting the collection activity of all debt types within the Non Tax Debt Collection section of the Franchise Tax Board.

This alternative is similar to Alternative 2 with an expanded scope to include all debt types within the Non Tax Debt Collection section's area of responsibility.

As explained in Alternative 2, a "shrink-wrapped" system will not provide the flexibility needed to support the complex nature of the system's requirements without significant customization. Implementing a COTS solution, in effect a one-size-fits-all application, as a business solution to encompass distinctly different debt types, each with their own common and unique requirements, would significantly increase the complexity of the customization as well as negatively impact the projected implementation schedule.

FTB has a successful track record for implementing commercial off the shelf solutions. However, FTB implementations of COTS solutions have required significant customization to accommodate our business and legislative needs.

Implementing a COTS solution for all Non Tax Debt types is not a viable solution as it is not cost effective, due to the extensive customization necessary, and it would not meet the needs of our customers as it would result in an adverse impact on future revenue due to the extended time frames needed to complete the customization of the base system.

Advantages

- 1. Lower risk to the State because the contractor administers the modification and development/customization of the product.
- 2. Alternative procurement could be pursued thus deferring development costs into the out years.

<u>Disadvantages</u>

- 1. Procurement lead-time for this solution would negatively impact the ability to increase revenue as quickly as the selected solution. Each year of delay would mean lost revenue of approximately \$16 million dollars.
- 2. Requires multiple customization development cycles for each debt type, resulting in increased system complexity and substantive cost increases.
- 3. In spite of customization, there is potential for a product that does not completely meet the needs of the customers.
- 4. Complexity issues within system funding; each debt type retains separate funding requirements and oversight.
- 5. Customized COTS are usually not eligible for upgrades of the core product.
- 6. In the cases where upgrades are possible, substantial maintenance expenditures are required which risk the existing code base.
- 7. Inability to reuse existing program code, batch processes and interfaces.

8. Does not meet the legislation as mandated as the legislation addresses the expansion of the COD program only.

Costing

Costing was not completed for this alternative as a result of the costing effort of Alternative 2, which was significantly higher then the recommended solution. In addition, the extended schedule associated with the extensive modifications needed on an off the shelf software product make this not a viable option. Alternative 3 would be more cost prohibitive and schedule impaired, due to the expanded scope of including all NTD debt types.

Alternative 4: Implement a FTB developed system capable of supporting the collection activity of all debt types within the Non Tax Debt Collection section of the Franchise Tax Board.

Developing 'one system' to support the workload requirements of all debt types within the Non Tax Debt Collection Section of FTB is not a viable solution.

FTB's Non Tax Debt Collection Section has a proven track record of implementing and improving upon the collection of debts owed to various municipalities within the State of California. The legislature continues to signify satisfaction with the efforts of the Non Tax Debt Collection section's contributions through continued expansion of programs via legislative mandates.

These legislatively mandated debt types within the span of control of the Non Tax Debt Collection section are not interconnected. Each debt type has its own unique requirements, as each customer (County, Courts, Municipalities, etc.) have their own processes for how FTB collects their debts. Each debt type also has its own funding structure to support the collection of each particular debt type. Funds from one debt type could not be used to develop and implement a system for another debt type. Even an inadvertent commingling of funds, occurring in the development of one collection system, could result in a loss of revenue and could jeopardize our favorable relationships with our clients.

There are advantages to the 'one system' IT structure, however, due to the unique attributes of the Non Tax Debt Collection's legislatively mandated debt types, significant customization would have to occur for each customers needs to be fully met. The resulting customization would negate the 'one system' endeavor and result in numerous separate systems, requiring on-going maintenance to support each separate system.

Advantages

- 1. Leverages one system to support the Court Ordered Debt, Industrial Health and Safety and Vehicle Registration Collection debt types.
- 2. Supports enterprise technology architecture, which creates a common skill set for development, testing and program area staff.

Disadvantages

- Requires multiple customization development cycles for each debt type, resulting in unfavorable schedule impacts, increased system complexity and substantive cost increases.
- 2. Complexity issues within system funding; each debt type retains separate funding requirements and oversight.
- 3. Does not meet the legislation as mandated as the legislation addresses the expansion of the COD program only.

Costing

Costing was not completed for this alternative, as it is not a viable option due to the extended schedule and increased cost associated with the expanded scope of including all NTD debt types.

Alternative 5: Utilize the existing tax program's Accounts Receivable Collection System (ARCS) for the Court Ordered Debt collection program.

FTB's Personal Income Tax Collection Program and the Business Entities Collection Program utilize the ARCS collection system to support its collection activities. The ARCS system was a COTS solution, which resulted in considerable expenditures to customize the system to meet the department's needs.

For instance, the ARCS project required \$25 million in contractor services and \$9 million for state staff in order to modify and implement the \$1 million base system. These modifications have made ARCS an extremely complex application, crossing multiple platforms, geared towards the collection of tax debts.

The collection of income tax debt results in a vital and consequential portion of California's General Fund revenue. Approximately 61.6% of the 2004 Calendar Year General Fund revenue is directly attributed to income tax revenue.

Incorporating the Court Ordered Debt collection program into the ARCS system would result in an increase in volume of approximately 8 million cases. The infrastructure that currently operates the ARCS system would be greatly impacted if such a volume of cases were added to it.

Because of the State's critical dependency on the income tax collection revenue to the General Fund, it is inherently too risky to impact the ARCS collection system by augmenting it to support the expanded Court Ordered Debt collection program. As a result of the extensive customization that would be required, and the potential risk to the existing system, it is not feasible to use ARCS for COD.

Advantages

- 1. Provides a centralized repository within one hierarchal system.
- 2. Minimizes learning curve within technical and business areas, as system functionality would be similar.

Disadvantages

- 1. ARCS would become unmaintainable due to the increased complexity and size.
- 2. ARCS utilizes a client/server application using Sybase RDBMS on the server side and PowerBuilder for the client. These tools are listed as 'in containment' in FTB's technology document for no new development.
- 3. Successful recruitment and retention of knowledgeable IT professionals diminishes when supporting outdated technology.

Costing

Costing was not completed for this alternative, as it is not a viable option due to the inherent risk of jeopardizing the stability of the Personal Income Tax collection program through the expansion of the Accounts Receivable Collection System (ARCS).

6.0 Project Management Plan

6.1 Project Manager Qualifications

The Project Manager (PM) is an Administrator II in the Court Ordered Debt Section of the Revenue Recovery Services Bureau. She has over 12 years of proven leadership in project planning, development, and implementation in the collection field of FTB. The PM is a certified Project Management Professional (PMP) through the Project Management Institute. She is extremely knowledgeable of all business and technical areas of the department. She has demonstrated the ability to communicate, direct, and lead teams from varied technical and non-technical backgrounds efficiently and effectively. She has proven her experience leading and assisting several projects. She was the Business Process Reengineering (BPR) and Strata (Decision Analytics) Manager of the Accounts Receivable Collection System (ARCS). The PM also was a project consultant on the Tax Amnesty Project. She has experience with change management for implementing new systems. Her problem solving skills, problem resolution skills and good working relationships with staff and management make her an excellent choice as Project Manager.

The PM's proven leadership skills are complemented by the extensive Information Technology project experience of the Project Team.

6.2 Project Management Methodology

The FTB project management methodology is based on <u>A Guide to the Project Management Body of Knowledge</u> (PMBOK) third edition, and SIMM Section 45, Appendix A, and Section 200, <u>Project Management Methodology Guidelines</u>.

The Court Ordered Debt Project will follow a formal project management methodology. The following features the project management approach:

Phase	Milestone (such as)	Deliverable (such as)		
General Project	Progress Reviews	Change Management Procedure		
Management		Progress Reports		

(Project	- Phase Summary Reports	
Communications	- Baseline Analysis (technical,	
Management)	schedule, cost)	
	- Risk Assessment (initial, ongoing)	
	- Management Reports	
	- Task Reporting	

General Project Management Phase is an ongoing phase throughout the life of the project. This phase is not considered a reportable phase for project tracking purposes.

Phase	Milestone (such as)	Deliverable (such as)
Concept	Research/Development Analysis Kickoff Meeting Risk Assessment Funding/Resources	Project Notice/Summary Fact Sheet Project Study/FSR/BCP Preliminary Project Plan Risk Assessment Summary
Project Start	Detailed Project Plan Approval	Detailed Project Plan
Requirements	Requirements Reviews Functional Baseline Approval	Business/Technical/Operational Concept Specifications Design Programming Interfaces Change Proposals
Design	Design & Specification Reviews	Design - System, Interface
Development	Develop/Code Reviews Unit Test	Source Code Executable Code, Test Plans Test Results, Final Design
Test	Test Plan Approval Interface Test System Test	Test Plans, Test Procedures Test Verification Matrix
Implementation	Migrate to Production	Implementation Plan
Post Implementation	Monitor Production	Post Implementation Plan Final Documents, Closeout
Close Project	Finalization Documentation	Project Wrap-up/PIER

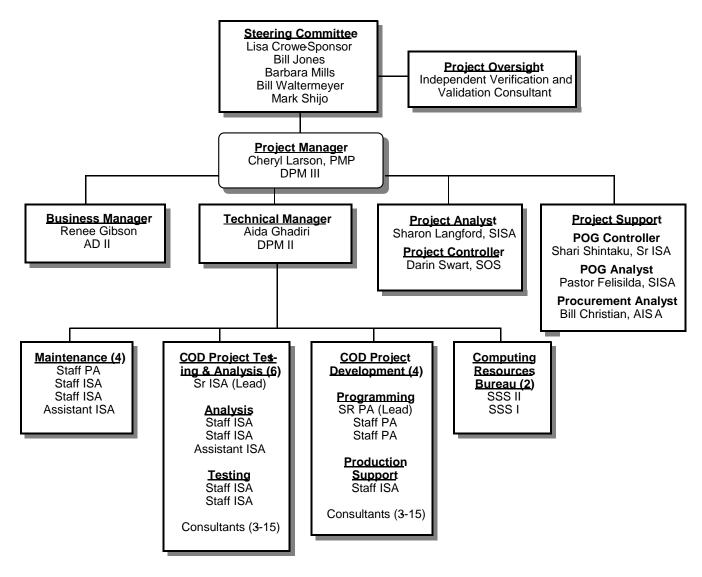
6.3 Project Organization

A successful project involves input, review, and involvement from many business areas, as well as from a number of technical areas of expertise. The key project team members are:

Project Sponsor: Lisa Crowe

Project Manager: Cheryl Larson, PMP

Court Ordered Debt Implementation Team



Project Stakeholders:

- FTB Taxpayer Information (TI)
- Enterprise Wide Bankruptcy System (EWBS)
- Industrial Health and Safety (IHS)
- Vehicle Registration Collections (VRC)

- EDD New Employee Registry (NER)
- Department of Motor Vehicles (DMV)
- DCSS Child Support Recovery (CSR)
- Courts/Counties
- FTB Disaster Zip Application
- FTB Tandem payment processing
- FTB Payor files

6.4 Project Priorities

Schedule	Scope	Resources
Constrained	Accepted	Improved

6.5 Project Plan

During start up, the project manager or designee will follow the standards of project management in PMBOK to develop the project plan. Microsoft Project or a similar tool will be used to develop the timeline and track the schedule, hours, resources etc. Each separate team will maintain their own project plan and communicate their status to the Project Manager.

6.5.1 Project Scope

Develop a collection system and augment program staff to allow FTB to collect delinquent court debts from clients statewide.

6.5.2 Project Assumptions

- 1. The functional requirements stated in Section 3.4, Business Functional Requirements, are attainable.
- 2. The necessary technical and business staff will be available to develop and deploy the project.
- 3. Funding will be available to support the procurement needs of the project.
- 4. Other system workloads will not impact the ability to complete this project.

6.5.3 Project Phasing

Phase 1: Core Functionality and Security Requirements

Phase 1 consists of a new database, intelligent case modeling and incorporating the existing functionality of the current COD application. This functionality includes both manual and automated collection efforts. From an automated standpoint, the system automatically sends various notices such as demands for payment, earnings withholding orders and levies to bank accounts. Manual functions include the ability to establish payment arrangements, post payments or document correspondence. Security requirements will be added to track accesses down to the individual case level

along with user security levels that restrict access within the system based on authorization sets.

• Phase 2: Required Remaining Functionality

Functionality in Phase 2 would increase the collection rate on the cases referred to FTB. The COD program is not utilizing the same remedies as used on the personal income tax side. These requirements would bring the COD collection methods into conformance with the best practices used in tax collections. For example, the system would issue an additional levy to an asset if the case were not paid in full.

Phase 3: External Reporting and Debtor Web Access

Phase 3 requirements have two components. The first component is the ability to query live data and create reports. The second component allowing debtor access through the web will assist with customer service issues due to increased volumes of anticipated contacts with debtors.

6.5.4 Roles and Responsibilities

Role	Responsibilities
COD Expansion Project Steering Committee	 Decision making and approval Provide project guidance for issues the project team is unable to resolve Ensure availability of necessary project resources for the study and implementation
Project Sponsor	 Ensure that the project conforms to departmental, Agency, and control agency guidelines Approve project study plan and implementation Ensure necessary Department resources are available
Project Manager	 Select team and assign tasks Facilitate meetings Identify and resolve project issues Provide status report to project sponsor, Steering Committee and Team Members Manage project implementation Evaluate and report project effectiveness Approve all deliverable documents
Technical Manager	 Develop approach/recommendation to meet the business requirements, which includes the development of the new system and on-going maintenance thereafter Identify personnel necessary to implement project Manage the contracted technical services contract and staff Manage project Risks Approve General System Design Documents and Detailed System Design Documents

Role	Responsibilities
Risk Manager	Role delegated to Technical Manager
Business Manager	 Identification of system requirements to meet business needs Identify personnel necessary to work with technical team to complete the study and implement and support the project upon approval Facilitate communication with clients on all aspects of the project Approve General System Design Documents and Detailed System Design Documents Approve all Business Requirements
Lead Analyst	Provide support with FSR, project Scope, objectives, and deliverables
Technical Staff	 Provide input on project scope, objectives, and deliverables Identify processes and system programming necessary to implement the project Provide technical expertise (program and system) for the duration of the project Provide status updates on task assignments Identify policy and implementation issues related to the project Design, develop, test, and deploy the project as described in this FSR
Project Oversight	Advisory and Project Oversight
POG Controller	The project controller monitors the project's timelines and budget by ensuring project stays on track.
POG Analyst	The POG analyst monitors the projects progress, and assists in the development, review and approval of required documentation.
Procurement Analyst	 Identify correct procurement processes to follow Provide procurement guidance Execution of the Contract/Delegation Purchase Order (Std. 65) Point of contact between the Contractor and the Project Manager for issue resolutions

6.5.5 Project Schedule

Task	Start	Finish	Deliverable	Milestone
Governance Council FSR approval	07/18/05	07/28/05	FSR	FSR approved by GC
Obtain Agency Approval	08/01/05	08/15/05	FSR	FSR approved by Agency
Finance approval	08/18/05	01/10/06	FSR	FSR Approved by DOF
Project Start	01/09/06	01/09/06		
Prepare and Release Bid Document for I V & V Oversight Services	01/10/06	02/17/06	Solicitation Document	
Receive Vendor Proposals for Oversight Services	03/17/06	03/17/06	Vendor Proposals Documents	
Evaluate/Review Vendor Proposals	03/20/06	04/14/06	Approved Evaluation & Selection Report	
Award Oversight Vendor Agreement(s)	04/21/06	04/21/06	Prepare Agreement Documents	Agreement sent to

Task	Start	Finish	Deliverable	Milestone
				Vendor(s)
Oversight Vendor Starts			Approved Contract	
Research: Develop and release competitive bid solicitation(s) for Technical Consultant(s)	05/01/06	07/01/06	Bid Documents ready for advertisement and distribution	Bid Documents Completed and sent to vendors
Software Research: Develop and release competitive bid solicitation document(s) for software license acquisitions.	07/01/06	08/01/06	Bid Documents ready for advertisement and distribution	Bid Documents Completed, sent to Vendors
Project Planning	07/03/06	09/01/06	Detailed Project Plan	Approved Project Plan
Phase 1 Basic Functionality				•
Research and Hire State Staff - Requirements			Statements of Work, New State Staff Hired	Resources Hired
Receive Vendor Proposals for Technical Consultants		08/18/06		
Receive Vendor Proposals for Software Products (Various Agreements)	09/01/06	10/01/06		
Review Technical Consultants Bid Response(s)	08/21/06	09/22/06	Bids Submitted	Bids received, reviewed and awardees selected
Award Technical Consultants Agreement(s)	09/29/06	09/29/06	Prepare Agreement Documents	Agreement sent to Vendor(s)
Technical Consultants Start	11/02/06	11/02/06	Approved Contract	
Review and Order Workstation/PC products			Select and order Workstation/PC from approved Strategic Source Supplier	Order processed
Receive Workstation/PC products	11/01/06	11/01/06		
Review Bid Response(s) for Software	10/01/06	11/08/06	Bid(s) Submitted	Bids received, reviewed and awardees selected
Award Procurement Software Agreement(s)	11/15/06	11/15/06	Prepare Agreement Documents	Agreement sent to Vendor(s)
Receive Software	01/01/07	01/01/07	Software	Software Received
Install Software	01/01/07		Installed Software	Software Installed
Hardware Research: Develop and release competitive bid solicitation documents(s) for CMAS, and competitive bid acquisitions.	12/01/06	01/01/07	Bid Documents ready for advertisement and distribution	Bid documents completed and sent to vendors
Receive Vendor Proposals for Hardware	02/01/07	02/01/07	Vendor Proposals documents for hardware	
Evaluate/Review Bid Response(s) for Hardware	02/01/07	03/01/07	Bid(s) Submitted	Bids received, reviewed and Awardees selected
Award Procurement Agreement(s) for Hardware	03/04/07	03/04/07	Prepare Agreement Documents	Agreement sent to Vendor(s)
Receive Hardware Equipment	04/15/07	04/15/07	Hardware Equipment	Hardware Received
Install Hardware	04/15/07		Installed Hardware	Development Environ Completed
Write Requirements for database, batch, GUI, conversion and external interfaces	01/15/07	07/16/07	Requirements and General Design document	Requirements and General Design Completed

Task	Start	Finish	Deliverable	Milestone
Design database, batch, GUI, conversion and external interfaces	03/15/07	11/15/07	Detailed System Design	Design Completed
Code database, batch, GUI, conversion and external interfaces	05/15/07	03/15/08	Code / Unit Test	System Code Completed
Test database, batch, GUI, conversion and external interfaces	06/15/07		System Test Plan, Conditions, Test Results	System Test Completed
Convert Database	08/21/08	09/22/08	Converted Database	Conversion Completed
User Acceptance	09/10/08	09/20/08		User Sign-off
Implementation	09/22/08	09/22/08		Basic System in Production
Phase 2 Remaining Required Functionality				
Write Requirements batch, GUI, and external interfaces	09/24/08		Requirements and General Design document	Requirements and General Design Completed
Design batch, GUI and external interfaces	11/01/08	12/03/08	Detailed System Design	Design Completed
Code batch, GUI and external interfaces	12/03/08	02/04/09	Code / Unit Test	System Code Completed
Test batch, GUI and external interfaces	02/04/09		System Test Plan, Conditions, Test Results	System Test Completed
User Acceptance	05/04/09	05/08/09		User Sign-off
Implementation	05/11/09	05/11/09		System in Production
Phase 3 External Reporting & Debtor Access				
Write requirements	09/24/08			Requirements and General Design Completed
Design	11/21/08	02/04/09	Detailed System Design	Design Completed
Code	02/04/09	05/01/09	Code / Unit Test	System Code Completed
Test	05/01/09		System Test Plan, Conditions, Test Results	System Test Completed
User Acceptance	08/03/09	08/07/09		User Sign-off
Implementation	08/08/09	08/08/09		System in Production
Post Implementation	10/01/09		Monitor Production	Post Implementation Plan, Final Docs
Project Closing Activities				
Conduct Project Retrospective	09/01/09	01/01/10	Lessons Learned document	Project Retrospective completed
Prepare Post Implementation Evaluation Report (PIER)	02/01/10	08/08/10	PIER	PIER completed

6.6 Project Monitoring

The independent project oversight requirements specified in SIMM 45 will be followed; the oversight reviews will be consistent with the project criticality rating established by Finance.

Project status reports will be submitted for the Project Manager's review and to the Project Oversight and Guidance Section.

Each project lead will submit project status reports to the Project Manager. The Project Manager will schedule reoccurring status meetings to communicate:

- Tasks accomplished
- Tasks that missed scheduled completion dates and the related impacts
- Upcoming tasks
- Identification, progress, or outcomes of problems or issues
- Identification of new risks
- Occurrence of risks
- Risk mitigation

Project team and technical staff meetings will be held on a regular basis. Team meetings will address any issues and areas of concern identified in the status reports given at the meetings. The team will review the project schedule, identify and determine a course of action or mitigation for any items that are off schedule, and address resource concerns or any other issues.

6.7 Project Quality

The project leads are responsible for the project's quality assurance. These responsibilities will include clarification of requirements and verification that unit and system testing address these requirements. The responsibilities will include assurance that risks are adequately identified and mitigation plans are identified and appropriate.

The Project Manager is responsible for assuring the quality of the project. It is the Project Manager's role to monitor schedules, implementation plans, prerequisites, and confirm that all project expectations are met.

6.8 Change Management

The project will use the standard FTB Change Control Process.

6.9 Authorization Required

This project requires approval by the Governance Council, the State and Consumer Services Agency, and the Department of Finance.

7.0 Risk Management Plan

7.1 Risk Management Approach

The Project Manager will prepare an initial risk assessment. The document will be the baseline for subsequent periodic reviews. At the completion of each milestone, the project lead will document and assess any potential risks. If the project deviates significantly from the scope or budget, the project lead will review the original or previously updated risk assessment questionnaire. If the project lead identifies risk during these evaluations, he or she will contact

the Project Manager for direction. The Project Manager will take the assessment to the internal steering committee for resolution.

7.2 Risk Assessment Matrix

The high-level project risks are identified in the Risk Assessment Matrix (see appendix 7).

7.3 Assessment

The high-level risk assessment is an initial broad view of the risk associated with the project. The identification of all potential risks uses the project work breakdown structure, project plan, and the PMBOK knowledge areas as input to the process.

7.3.1. Risk Identification

During the planning stage of the project, risk information is gathered in an initial meeting of the Project Manager and the project team members. Project staff are asked to bring a list of potential risk items to the meeting. The staff discussion of risks generates a complete list of potential risks.

7.3.2 Risk Analysis and Quantification

After identifying the potential risks, the project team reviews each risk to determine if it is tangible and measurable. Based on the analysis of each risk, the set of risks that will be formally managed are those deemed most likely to have a negative impact to the project.

7.3.3 Risk Prioritization

The priority of the risk is a determination of the importance of the risk based upon 1) potential impact of the risk on the project, 2) the probability of occurrence, 3) the risk time frame, and 4) risk severity. The determination of risk priority is a subjective, qualitative process that considers the criticality of internal and external project factors within the specific context of the project. At a minimum, the 10 highest risks will be tracked in the project Risk Worksheet.

7.4 Risk Response

The potential responses to an identified risk include avoid, accept, mitigate, and share. The project team has identified the risk response to each of the risks listed in the project Risk Worksheet under the Risk Response column. For each response that is accepted, the contingency measures have been developed and are summarized in the Risk Worksheet.

7.5 Risk Tracking and Control

The objective of the Tracking and Control phase is to ensure that all steps of the risk management process are being followed and, as a result, risks are being mitigated. Risk tracking and control involves the oversight and tracking of risk mitigation action plan execution, contingency plan execution, reassessment of risks, reporting risk status, and recording risk information changes in the project Risk Worksheet.

7.5.1 Risk Tracking

The project manager is responsible for the high-level oversight of the execution of mitigation and contingency plans for all risks identified in the project Risk Assessment Matrix. The project manager is responsible for ensuring that the project sponsor is updated and approves of all changes in status for high-severity risks.

7.5.2 Risk Control

The Project Manager will reassess the risk information in the project Risk Worksheet to determine if any changes are needed. For example, the risk severity or time frame could change based upon project events or other information. Reassessment of risk information will be performed on a monthly basis or more frequently if needed. Risk status is included as part of the project status meetings. Risk status reporting will focus on high severity risks. Information presented will include the status of risk mitigation plans, changes in risk severity for known risks, and any new risks identified.

8.0 Economic Analysis Worksheets (EAWs)

See attached EAWs.

Attachments

- 1. Executive Project Approval Transmittal
- 2. Project Summary Package
- 3. FAWs

Appendix 1. Project Criticality Evaluation Factors – Reportable Projects

Factor	Rating	lity Evaluation Factors – Reportable Projects Substantiation of Rating
Size	High	One-Time Costs are \$13,120,553
OIZO	9	
Project	Low	Cheryl Larson, PMP
Manager		Administrator II in Accounts Receivable Management Division as a business manager of the Accounts Receivable Collection Systems (ARCS) Business Process Reengineering and Strata (Decision Analytics) for a total project cost \$46.7 million, 4-year project duration. Internal projects under \$500,000 for the ARM Division.
		Cheryl has 12 years of proven leadership in project planning, development, implementation, and change management experience. Cheryl has had oversight responsibilities of contract staff of up to 20.
Project Team	Low	Aida Ghadiri Data Processing Manager II, 1) IT Transition Manager of CSR to DCSS 2) Manager of the Child Support Recovery System 3) Manager of the Legacy Non Tax Debt Collection (CDC) System
		Renee Gibson Administrator II in Court Ordered Debt. 1) Court Ordered Debt Conversion Project Business Manager 18 month project 2.) PITWSS 24 month project served as an Application Programmer and Test Lead. 3.) Child Support Collection System Enhancement; subject matter expert for billing and payments rewrite. 12-month project.
		Jeff Garcia Systems Software Special II, 1) 20 years experience in various application development projects (private and public sectors). 2) 10 years experience in the advances of software development processes and practices. 3) Experience as a systems architect for various web applications. 4) Case Management Information System for the Department of Corrections \$40 Million 5) Children's Medical Service at Department of Health Services \$2 Million.
		Jeff had oversight of contractor staff at the department of Health Services and the department of Pesticide Regulation.
		Wayne Shinagawa Staff Programmer Analyst, Over 20 years of application development experience on various computer systems, ranging from Data Security to a Student Information System at California State University, Sacramento. Experienced on programming mainframe and client server applications for the Court Ordered Debt System and the Child Support Collection System.

		Cheryl Slama Senior Programmer Analyst Specialist 1) ARCS Interface team lead for the mainframe application development programmers - 2 1/2 years. 2) ARCS Strata team lead for both the Personal Income Tax and Business Entities implementations of the system 3-year project. 3) Y2K coordinator for Collection Systems and Administrative Systems and member of agency Y2K team 2 years.
Project Type Elements	High	 Component: Hardware Activity – N/A Element – N/A Rating – N/A Component: Software Activity – Custom update/Upgrade Element – Distributed Enterprise Server Rating – High

Project Score Table

(a)	Factor	(b) Rating
1	Size	3
2	Project Manager	1
3	Project Team	1
4	Туре	3
Total		8
Average		2
	Project Rating	Medium

Step 1: Total column (b) and enter in the Total field.

Step 2: Divide the Total field value by four and enter in the Average field.

Step 3: Using the Average field value, assign the project rating by selecting High, Medium, or Low from the table below.

Average Results	Project Rating
2.26 – 3.0	High
1.51 – 2.25	Medium

Average Results	Project Rating	
1.0 – 1.5	Low	

Definitions of Terms: SIMM 45, Appendix H

Key Staff: Staff in leadership roles, such as team leads, and staff bearing significant technical responsibility, such as the Database Administrator and System Architect, who may not be team leads. **Like Project**: A project in the same size category, similar degree of complexity, and similar technology as the subject project.

Appendix 2. COD Client Participation Schedule

	CLIENT PARTICIPATION SCHEDULE			
		As of April 1,	2005	
	County	Superior Court	Probation Dept	Revenue Reimbursement or other County Collection Entity
Existing Counties Participating	Participating Clients and client start date			
1	Alameda 1996			X
2	Contra Costa 1997	X		X
3	Fresno 2002			X
4	Glenn 2004	Х		
5	Humboldt 2002			Revenue Recovery
6	Kern 2002	X	X	
7	Lake 2000			X
8	Madera 1997			Revenue Service Div
9	Marin 2000			Central Collections
10	Mendocino 1998			X
11	Merced 1998			X
12	Monterey 2002	X		
13	Orange 2005		X	
14	Placer 1997			X
15	Plumas 1997			X
16	Riverside 2004	X		
17	Sacramento 1995			Revenue Recovery
18	San Bernardino 1998			X
19	San Diego 2002	Х		X
21	San Joaquin 2002			Revenue Recovery
22	San Luis Obispo 2000		Х	
23	San Mateo 2004			X
24	Santa Barbara 2003		Х	
25	Santa Clara 1998			Dept of Revenue
26	Shasta 1998	Х		·
27	Sonoma 1998			Central Collections
28	Tulare 2001		Х	
29	Tuolumne 1996			Revenue Recovery
30	Yolo 1997			Revenue Reimbursement
31	Ventura 1996	Х		
32	Victims Comp & Gov't Claims Board 2002			Х

	County	Superior	Probation	Revenue Reimbursement
	County	Court	Dept	or other County Collection
		33	2001	Entity
Clients	not yet participating			
1	Alameda	Х	Х	
2	Alpine	Х	Х	Х
3	Amador	Х	Х	Х
4	Butte	Х	Х	Х
5	Calaveras	Х	Х	
6	Colusa		Х	X
7	Contra Costa	Х	Х	Х
8	Del Norte	Х	Х	Х
9	El Dorado	Х	Х	X
10	Fresno	Х	Х	
11	Glenn		Х	Х
12	Humboldt	Х	Х	
13	Imperial	Х	Х	Х
14	Inyo	Х	Х	Х
15	Kern			Х
16	Kings	Х	Х	Х
17	Lake	Х	Х	
18	Lassen	Х	Х	Х
19	Los Angeles	Х	Х	Х
20	Madera	Х	Х	
21	Marin	Х	Х	
22	Mariposa	Х	Х	Х
23	Mendocino	Х	Х	
24	Merced	Х	Х	
25	Modoc	Х	Х	Х
25	Mono	Х	Х	Х
27	Monterey		Х	Х
28	Napa	Х	Х	X
29	Nevada	Х	Х	X
30	Orange	Х		Х
31	Placer	Х		Х
32	Plumas	Х	Х	
33	Riverside		Х	Х
34	Sacramento	Х	Х	
35	San Benito	Х	X	Х
36	San Bernardino	Х	Х	
37	San Diego		Х	
38	San Francisco	Х		Х
39	San Joaquin	Х	X	
40	San Luis Obispo	Х		Х
41	San Mateo	Х	X	
42	Santa Barbara	Х		X
43	Santa Clara	Х	X	
44	Santa Cruz	Х	Х	Х
45	Shasta		X	Х
46	Sierra	Х	X	X
47	Siskiyou	Х	X	Х
48	Solano	Х	X	Х
49	Sonoma	Х	X	
50	Stanislaus	Х	X	Х

51	Sutter	Х	Х	Х
52	Tehama	Х	Х	X
53	Trinity	Х	Х	X
54	Tulare	Х		X
55	Tuolumne	Х	Х	
56	Ventura		Х	X
57	Yolo	Х	Х	
58	Yuba	Х	Х	X
Clients :	scheduled to participate in the			
next 12	months			
	Inyo Superior Court			
	Los Angeles Probation			
	3 Orange Superior Court			
	4 San Francisco Probation			
	San Luis Obispo Superior Court			
	Santa Barbara Superior Court			
	Sierra Superior Court			
	Siskiyou Superior Court			
	Sonoma Superior Court			
10	Sutter Superior Court			

Appendix 3. COD Client Participation Procedures

New Client Procedures

Phase 1: Planning Meeting

Phase 1 consist of a planning meeting. The purpose of the planning meeting is to discuss the operational logistics and requirements for all phases of the implementation process. The attendees include business and IT representatives from the client and FTB COD. The agenda items include, system and record layout requirements, the Memorandum of Understanding, COD collection process, fiscal management and time frames for targeted implementation date.

Phase 2: Test File

During phase 2, the client provides a test file for review. The test file is reviewed for format, data validity and data integrity. The client drives the timeframe for this process. Some client's submit a test tape within 30 days, and is able to complete fixes within weeks; other clients may take 4-6 months to submit a test tape (typically, this is driven by the client's IT resource availability and/or other operational constraints).

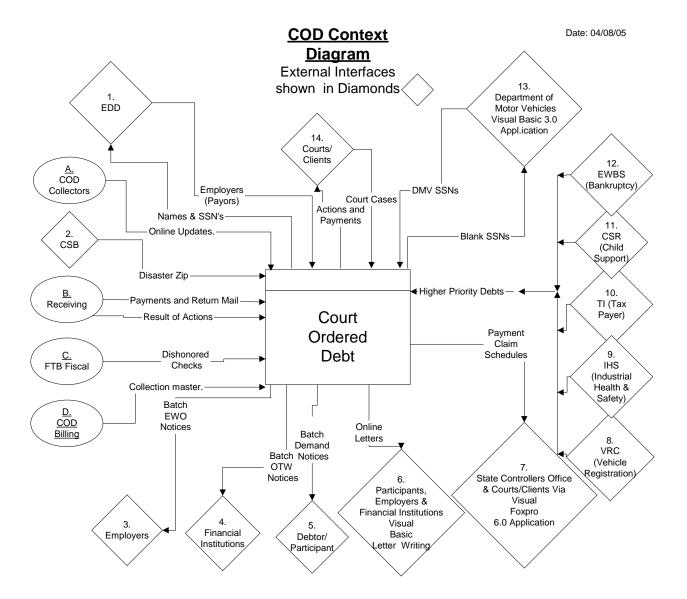
Phase 3: Update Test and Production

After successful testing, a production tape is received and reviewed once more for data validity and format. If still no error, tape is placed into Production.

Phase 4: Training and Implementation

Client is fully implemented; client staff is trained on operational needs and scenarios. And, the collection process commences one week after training.

Appendix 4. Interface Context Diagram



Appendix 4. Interface Context Diagram Description

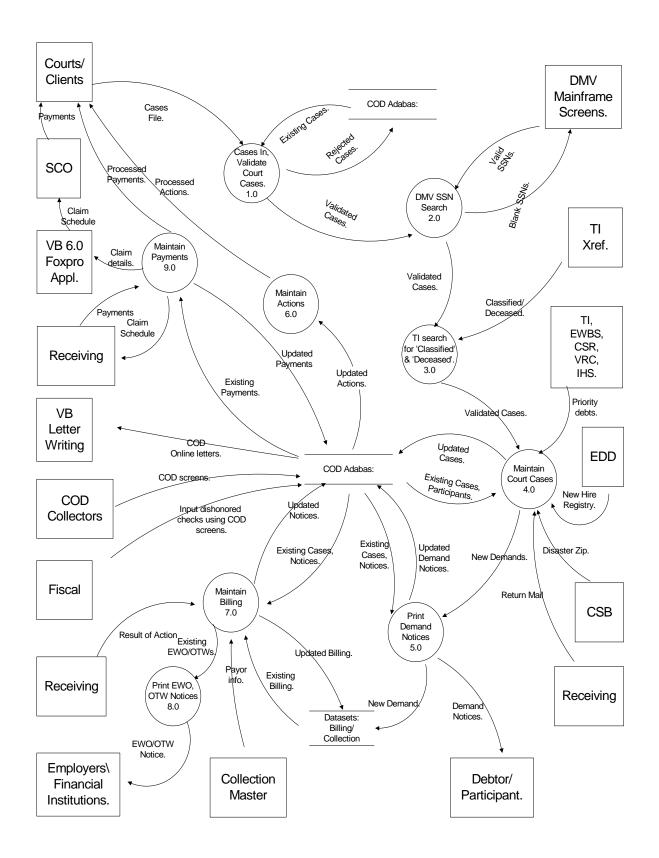
Court Ordered Debt interfaces with the following external systems:

- 1. COD sends Names and SSN's to EDD Monthly. EDD returns employer names (Payors) Monthly.
- 2. Collections Systems Bureau (CSB) sends information on disaster zip codes on demand in the event of a disaster.
- 3. Earnings Withholding Orders (EWO) letters are created in batch and sent to employers daily. Volumes are adjusted based on FTB's ability to respond to increasing call demands. Volumes are also adjusted based on client directives.
- 4. Order to Withhold (OTW) letters are created in batch and sent to financial institutions daily. Volumes are adjusted based on FTB's ability to respond to increasing call demands. Volumes are also adjusted based on client directives
- 5. Demand letters are created in batch and sent to participants daily. Volumes are adjusted based on FTB's ability to respond to increasing call demands. Volumes are also adjusted based on client directives.
- 6. On line letters are created and sent to participants, their employers and financial institutions daily.
- 7. Payment Claim Schedules are sent to the courts/counties and State Controllers office to confirm the amounts collected and remitted to them weekly.
- 8. Vehicle Registration Collections (VRC) sends information on any VRC collections for a participant that are higher priority debts weekly.
- 9. Industrial Health and Safety (I.H.S.) sends information on any I.H.S. collections for a participant that are higher priority debts weekly.
- 10. FTB's Taxpayer Information file sends information on any outstanding tax liabilities for a participant that are higher priority debts or if a person is deceased or confidential employee weekly.
- 11. Child Support Recovery (CSR) sends information on any child support collections for a participant that are higher priority debts weekly.
- 12. Enterprise Wide Bankruptcy System (EWBS) sends information on any bankruptcy information for a participant weekly.
- 13. COD sends cases to the Department of Motor Vehicles (DMV) to find Social Security Numbers monthly. DMV returns matched items to COD with SSN's monthly.
- 14. Courts/Counties (Clients) send new and updated case information to COD monthly. COD sends payment and updated case information to Courts/Counties (Clients) monthly.

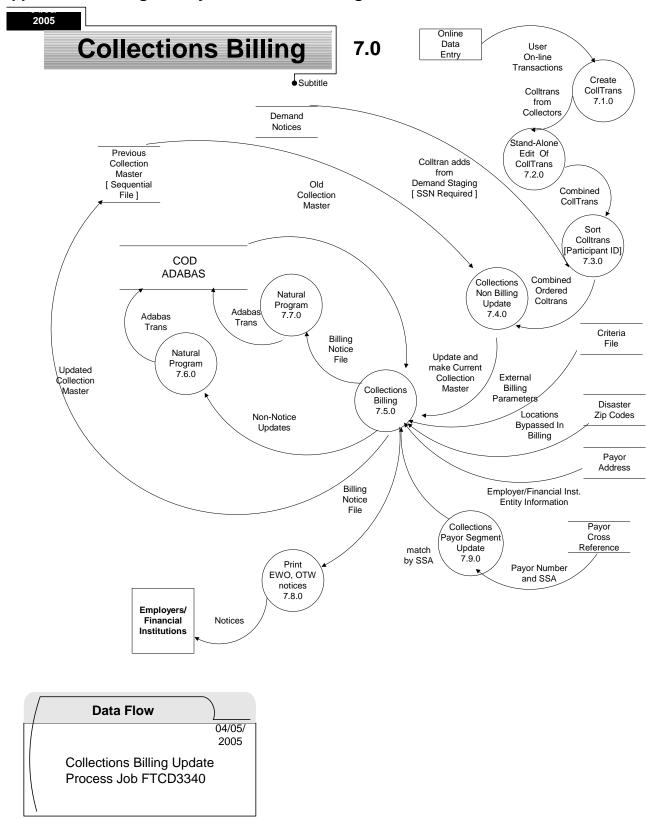
Court Ordered Debt internal to FTB interfaces:

- A. COD collectors enter information online to update the COD files daily.
- B. Receiving sends information to COD on payments, returned mail and result of actions (information from EWO and OTW requests) daily.
- C. FTB's Fiscal Accounting sends information to COD regarding dishonored checks weekly.
- D. A Collection Master file is sent from the COD billing subsystem to COD daily.

Appendix 5. Data Flow Diagram



Appendix 6. Billing Sub System Data Flow Diagram



App	Appendix 7. Risk Assessment Matrix									
Risk ID#	Risk Category	Risk Statement	Impact	Probability	Exposure	Time Frame	Severity	Mitigation Response	Risk Status	Status Change Date
1	Generic	Lack of current/updated documentation and system knowledge will likely result in instability of the current system.	High	Med	Med	Long	High	Accept		Bate
2	Generic	Learning Curve for FTB Technical and contracted staff on new software and tool sets may result in delays on the deliverable timeframes.	High	Low	Med	Short	Low	Reduce		
3	Generic	Lack of identification of all requirements may result in functionality not included in implementation and poor customer satisfaction.	Low	Low	Low	Short	Low	Reduce		
4	Generic	The current program revenue needs to remain consistent to support funding of the project expenditures, a reduction in revenue will result in project delays.	High	Med	Med	Long	High	Accept		
5	Generic	Recruitment and Retention of Contracted Staff will likely result in delayed contract deliverables.	High	Med	Med	Short	Med	Reduce		
6	Generic	External clients unable to meet system change schedules may result in delayed testing and implementation.	Low	Low	Low	Short	Low	Reduce		

For the risk category: Generic means common to most projects and Specific means unique to this project.

Risk Impact describes the consequences if the risk occurs. High means significant impact to budget, schedule, or quality; Medium means material impact on users, clients, or other key stakeholders; Low means no significant or material impact on budget, schedule, or quality.

Risk Probability describes the likelihood of the risk to occur. High means the risk is very likely; Medium means there is a 50-50 chance; Low means the risk is unlikely.

Risk Exposure is the intersection of risk impact and probability.

Timeframe is the period of time within which action must be taken in order to successfully mitigate the risk. Short means less than six months; Medium means six months to one year; Long means more than one year.

Risk Severity is the intersection of risk exposure and timeframe for mitigation and determines the priority of risks within the project.

Mitigation Response is the response to the risk. Eliminate means to remove the cause; Reduce means to lessen the probability or impact; Accept means to develop contingency plans and/or accept the risk's consequences.

Appendix 7. Risk Mitigation and Contingency Plan

Risk ID:	001
Date Identified:	March 2005
Risk Owner:	COD Project Staff
Risk Statement	Lack of current/updated documentation and system knowledge will
	likely result in instability of the current system.
Related Findings	Probability- Medium
	Impact- High
	Timeframe- Long
	Dependent on acquiring system knowledge
Risk Severity	High
Risk Mitigation	Long
Timeframe:	
Risk Category:	Technical Knowledge
Risk Mitigation	Acceptance
Response:	
Risk Mitigation Action	
Plan:	Conduct knowledge transfer sessions.
	Update the system documentation.
Risk Mitigation Status:	
Contingency Plan:	Review project priorities and redirect project staff.
	, , ,

Risk ID:	002
Date Identified:	March 2005
Risk Owner:	COD Project Staff
Risk Statement	Learning curve for FTB technical and contracted staff on new software and tool sets may result in delays on the deliverable timeframes.
Related Findings	Probability- Low Impact- High Timeframe- Short Dependent on Training
Risk Severity	Low
Risk Mitigation Timeframe:	Short
Risk Category:	Technical Staff Training
Risk Mitigation Response:	Reduction
Risk Mitigation Action Plan:	Formal training for FTB staff prior to project start Request trained contracted staff as part of the bid process.
Risk Mitigation Status:	
Contingency Plan:	Hire development staff before development is scheduled to bin to allow training time.

Risk ID:	003
Date Identified:	March 2005
Risk Owner:	COD Project Staff
Risk Statement	Lack of identification of all requirements may result in functionality not included in implementation and poor customer satisfaction.
Related Findings	Probability- Low
	Impact- Low

	Timeframe- Short
	Dependent on staff responsible for system design/requirements
Risk Severity	Low
Risk Mitigation	Short
Timeframe:	
Risk Category:	System Design
Risk Mitigation	Reduction
Response:	
Risk Mitigation Action	Extensive business process re-engineering prior to project start.
Plan:	
Risk Mitigation Status:	
Contingency Plan:	Submit request to obtain additional project funding.
	, , ,

Risk ID:	004
Date Identified:	March 2005
Risk Owner:	COD Project Staff
Risk Statement	The current program revenue needs to remain consistent to support
	funding on the project expenditures; a reduction in revenue will result
	in project delays.
Related Findings	Probability- Medium
	Impact- High
	Timeframe- Long
	Dependent on actual revenues
Risk Severity	High
Risk Mitigation	Long
Timeframe:	
Risk Category:	Project Funding
Risk Mitigation	Acceptance
Response:	
Risk Mitigation Action	Concentrate collection activities on most lucrative accounts to
Plan:	maximize revenue.
	Reject cases at intake that don't meet appropriate collection criteria.
Risk Mitigation Status:	
Contingency Plan:	
	Submit request to obtain additional time for project.

Risk ID:	005
Date Identified:	March 2005
Risk Owner:	COD Project Staff
Risk Statement	Recruitment and retention of contracted staff will likely result in delayed contract deliverables.
Related Findings	Probability- Medium Impact- High Timeframe- Short Dependent on Vendor
Risk Severity	Medium
Risk Mitigation	Short
Timeframe:	
Risk Category:	Contracted Technical Staff
Risk Mitigation	Reduction
Response:	
Risk Mitigation Action	Contract with multiple vendors to obtain greater resource flexibility.

Plan:	
Risk Mitigation Status:	
Contingency Plan:	The project will need to revisit scope.

Risk ID:	006
Date Identified:	March 2005
Risk Owner:	COD Project Staff
Risk Statement	External clients unable to meet system change schedules may result
	in delayed testing and implementation.
Related Findings	Probability- Low
	Impact- Low
	Timeframe- Short
	Dependent on Clients
Risk Severity	Low
Risk Mitigation	Short
Timeframe:	
Risk Category:	Schedule Changes
Risk Mitigation	Reduction
Response:	
Risk Mitigation Action	Frequent communication with external clients to gauge their
Plan:	readiness for testing and implementation.
Risk Mitigation Status:	
Contingency Plan:	Develop a conversion processor that will convert data received from
	external entity to interface with the Department.

EXISTING SYSTEM/BASELINE COST WORKSHEET

All costs are shown in whole (unrounded) dollars.

Department: Franchise Tax Board Project: COD Expansion (05-01)

Date: 11/08/05

FSR EAW

	FY	2005/06	FY	2006/07	FY	2007/08	FY	2008/09	FY	2009/10	FY	2010/11		TOTAL
	PYs	Amts	PYs	Amts										
Continuing Information														
Technology Costs														
Staff (salaries & benefits)	6.9	794,466	6.9	794,466	6.9	794,466	6.9	794,466	6.9	794,466	6.9	794,466	41.4	4,766,796
Hardware Lease/Maintenance		7,625		7,625		7,625		7,625		7,625		7,625		45,750
Software Maintenance/Licenses		0		0		0		0		0		0		0
Contract Services		0		0		0		0		0		0		0
Data Center Services		0		0		0		0		0		0		0
Agency Facilities		0		0		0		0		0		0		0
Other		25,065		25,065		25,065		25,065		25,065		25,065		150,390
Total IT Costs	6.9	827,156	6.9	827,156	6.9	827,156	6.9	827,156	6.9	827,156	6.9	827,156	41.4	4,962,936
Continuing Program Costs:														
Staff	53.8	3,660,863	53.8	3,660,863	53.8	3,660,863	53.8	3,660,863	53.8	3,660,863	53.8	3,660,863	322.8	21,965,178
Other		1,266,653		1,266,653		1,266,653		1,266,653		1,266,653		1,266,653		7,599,918
Total Program Costs	53.8	4,927,516	53.8	4,927,516	53.8	4,927,516	53.8	4,927,516	53.8	4,927,516	53.8	4,927,516	322.8	29,565,096
TOTAL EXISTING SYSTEM COSTS	60.7	5,754,672	60.7	5,754,672	60.7	5,754,672	60.7	5,754,672	60.7	5,754,672	60.7	5,754,672	364.2	34,528,032

Department: Franchise Tax Board Project: COD Expansion (05-01)

PROPOSED ALTERNATIVE: Develop New COD System (DB2, Cobol, Java)

All costs are shown in whole (unrounded) dollars.

Date: 11/08/05

FY :	2005/06	FY:	2006/07	FY	2007/08	FY	2008/09	FY	2009/10	FY	2010/11		TOTAL
PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
3.5	307,105	17.8	1,577,810	17.8	1,574,043	8.2	738,053	1.5	129,568	0.0	0	48.8	4,326,579
	3,648		5,472		0		0		0		0		9,120
	0		181,778		0		0		0		0		181,778
	0		145,305		0		0		0		0		145,305
	0		0		0		0		0		0		0
	0		606,980		3,290,887		3,084,376		138,307		0		7,120,550
	0		0		0		0		0		0		0
	0		173,500		99,500		134,250		67,125		0		474,375
	0		95,000		169,000		134,250		67,125		0		465,375
	0		0		0		0		0		0		0
	0		875,480		3,559,387		3,352,876		272,557		0		8,060,300
	0		0		0		0		0		0		0
	0		0		0		0		0		0		0
	7,211		280,268		64,793		42,394		2,805		0		397,471
3.5	317,964	17.8	3,066,113	17.8	5,198,223	8.2	4,133,323	1.5	404,930	0.0	0	48.8	13,120,553
0.0	0	1.0	75,531	1.2	93,759	13.2	1,111,397	21.6	1,806,739	22.5	1,893,383	59.5	4,980,809
	0		0		1,616		2,316		1,616		2,316		7,864
	0		0										58,000
	0		0		0		0		_		0		0
	0		0		0		0		0		0		0
	0		0		0		0		0		0		0
	•		0		0		0		0		0		0
	0		5,490		2,351		31,072		40,098		41,965		120,976
0.0	0	1.0	81,021	1.2	112,226	13.2	1,159,285	21.6	1,862,953	22.5	1,952,164	59.5	5,167,649
3.5	317,964	18.8	3,147,134	19.0	5,310,449	21.4	5,292,608	23.1	2,267,883	22.5	1,952,164	108.3	18,288,202
6.1	731,151	6.4	751,402	5.6	689,751	4.0	540,548	0.0	0	0.0	0	22.1	2,712,852
	31,241		31,764		22,634		18,646		0		0		104,285
6.1	762,392	6.4	783,166	5.6	712,385	4.0	559,194	0.0	0	0.0	0	22.1	2,817,137
53.3	3.616.542	65.3	4.246.624	65.3	4.246.624	153.6	9.099.542	153.6	9.099.542	153.6	9.099.542	644.7	39,408,416
	1 265 687						2 515 610		2 515 610		2 515 610		11,676,505
	1,200,007	1	1,447,207		1,414,701	1	2,515,610		2,313,010	1	2,515,610		11,070,305
53.3	4,882,229	65.3	5,695,911	65.3	5,661,325	153.6	11,615,152	153.6	11,615,152	153.6	11,615,152	644.7	51,084,921
				70.9									53,902,058
62.9		90.5		89.9						176.1			72,190,260
	0		17,641,000		17,641,000	i i	72,361,000				72,361,000		252,365,000
ļ	3.5 0.0 3.5 6.1 53.3 59.4	3.5 307,105 3,648 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 7,211 3.5 317,964 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PYs Amts PYs 3.5 307,105 3,648 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PYs Amts PYs Amts 3.5 307,105 3,648 17.8 5,472 15,77,810 5,472 0 181,778 145,305 145,305 0 0 606,980 0 0 0 0 173,500 95,000 0 0 95,000 0 0 0 875,480 0 0 0 0 0 0 0 0 7,211 280,268 3.5 317,964 17.8 3,066,113 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PYs Amts PYs Amts PYs 3.5 307,105 3,648 17.8 1,577,810 5,472 17.8 0 181,778 145,305 145,305 0 173,500 0 173,500 0 173,500 0 173,500 0 173,500 0 173,500 0 173,500 0 173,400 0 173,400 0	PYs Amts PYs Amts PYs Amts 3.5 307,105 17.8 1,577,810 17.8 1,574,043 3,648 5,472 0 0 181,778 0 0 145,305 0 0 0 0 606,980 3,290,887 0 0 0 0 95,000 99,500 0 0 95,000 169,000 0 99,500 0 <td< td=""><td>PYs Amts PYs Amts PYs Amts PYs 3.5 307,105 17.8 1,577,810 17.8 1,574,043 8.2 3,648 5,472 0 181,778 0 0 0 145,305 0 0 0 0 606,980 3,290,887 0 0 0 0 99,500 0 95,000 169,000 0 95,000 169,000 0 0 0 0 0 875,480 3,559,387 0 0 0 0 0 280,268 64,793 13.2 3.5 317,964 17.8 3,066,113 17.8 5,198,223 8.2 0.0 0 0 0 0 0 13.2 0.0 1.0 75,531 1.2 93,759 13.2 0.0 0 0 0 0 0 0<!--</td--><td>PYs Amts PYs Amts PYs Amts 3.5 307,105 17.8 1,577,810 17.8 1,574,043 8.2 738,053 3,648 5,472 0 0 0 0 0 0 181,778 0 0 0 0 0 0 0 145,305 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td><td>PYs Amts PYs Amts PYs Amts PYs Amts PYs 3.5 307,105 3,648 17.8 5,472 0 181,778 0 0 181,778 0 0 181,778 0 0 0 145,305 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td><td>PYs Amts PYs Amts PY</td><td>PYs Amts PYs 0 0 0</td><td> PYS</td><td> PYS</td></td></td<>	PYs Amts PYs Amts PYs Amts PYs 3.5 307,105 17.8 1,577,810 17.8 1,574,043 8.2 3,648 5,472 0 181,778 0 0 0 145,305 0 0 0 0 606,980 3,290,887 0 0 0 0 99,500 0 95,000 169,000 0 95,000 169,000 0 0 0 0 0 875,480 3,559,387 0 0 0 0 0 280,268 64,793 13.2 3.5 317,964 17.8 3,066,113 17.8 5,198,223 8.2 0.0 0 0 0 0 0 13.2 0.0 1.0 75,531 1.2 93,759 13.2 0.0 0 0 0 0 0 0 </td <td>PYs Amts PYs Amts PYs Amts 3.5 307,105 17.8 1,577,810 17.8 1,574,043 8.2 738,053 3,648 5,472 0 0 0 0 0 0 181,778 0 0 0 0 0 0 0 145,305 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td> <td>PYs Amts PYs Amts PYs Amts PYs Amts PYs 3.5 307,105 3,648 17.8 5,472 0 181,778 0 0 181,778 0 0 181,778 0 0 0 145,305 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td> <td>PYs Amts PYs Amts PY</td> <td>PYs Amts PYs 0 0 0</td> <td> PYS</td> <td> PYS</td>	PYs Amts PYs Amts PYs Amts 3.5 307,105 17.8 1,577,810 17.8 1,574,043 8.2 738,053 3,648 5,472 0 0 0 0 0 0 181,778 0 0 0 0 0 0 0 145,305 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PYs Amts PYs Amts PYs Amts PYs Amts PYs 3.5 307,105 3,648 17.8 5,472 0 181,778 0 0 181,778 0 0 181,778 0 0 0 145,305 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PYs Amts PY	PYs Amts PYs 0 0 0	PYS	PYS

^{/1} Redirected 3.5 PYs (One-time IT Costs) in FY 2005-06 consist of the following: 0.8 PYs are redirected from the Continuing Existing IT Staff to work on the One-time IT Project Costs for the Procurement process 0.5 PYs are redirected from the Continuing Existing Program to assist with some of the Project Management functions. The other 2.2 PYs are redirected from other areas within FTB, but will be funded from the /2 There is no General Fund cost for FTB to administer the COD program. COD is funded at a reimbursement rate of 15%, or the cost of collections whichever is less. The project expenses are paid each fiscal ye

ALTERNATIVE #1: Expand/Re-write Current COD (ADABAS) System

Department: Franchise Tax Board Project: COD Expansion (05-01)

Date: 11/08/05

FSR EAW

All costs are shown in whole (unrounded) dollars.

		2005/06	FY	2006/07	FY	2007/08	FY	2008/09	FY	2009/10	FY	2010/11	•	TOTAL
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
One-Time IT Project Costs														
Staff (Salaries & Benefits)	3.5	306,160	16.6	1,671,444	23.8	2,137,038	18.7	1,726,856	1.9	167,863	0.0	0	64.5	6,009,361
DGS Analyst		3,648		5,472		0		0		0		0		9,120
Hardware Purchase		0		82,670		0		0		0		0		82,670
Software Purchase/Ugrade		0		17,375		0		0		0		0		17,375
Telecommunications		0		0		0		0		0		0		0
Contract Services														
Software Customization		0		4,566,632		607,090		975,783		1,650,477		0		7,799,982
Project Management		0		0		0		0		0		0		0
Project Oversight		0		177,449		106,469		212,938		212,938		0		709,794
IV&V Services		0		0		0		0		0		0		0
Other Contract Services		0		0		0		0		0		0		0
TOTAL Contract Services		0		4,744,081		713,559		1,188,721		1,863,415		0		8,509,776
Data Center Services		0		0		0		0		0		0		0
Agency Facilities		0		0		0		0		0		0		0
Other	-	7,211	-	134,579		75,497		56,358		3,732		0		277,377
Total One-time IT Costs	3.5	317,019	16.6	6,655,621	23.8	2,926,094	18.7	2,971,935	1.9	2,035,010	0.0	0	64.5	14,905,679
Continuing IT Project Costs														
Staff (Salaries & Benefits)	0.0	0	1.0	75,531	5.0	437,122	12.0	1,017,206	20.4	1,712,548	21.4	1,799,192	59.8	5,041,599
Hardware Lease/Maintenance		0		0		1,616		2,316		1,616		2,316		7,864
Software Maintenance/Licenses		0		0		0		0		0		0		0
Telecommunications		0		0		0		0		0		0		0
Contract Services		0		0		0		0		0		0		0
Data Center Services		0		0		0		0		0		0		0
Agency Facilities Other		0		5,490		9,632		30,673		34,141		41,569		121,505
									-		-			
Total Continuing IT Costs	0.0	0	1.0	81,021	5.0	448,370	12.0	1,050,195	20.4	1,748,305	21.4	1,843,077	59.8	5,170,968
Total Project Costs	3.5	317,019	17.6	6,736,642	28.8	3,374,464	30.7	4,022,130	22.3	3,783,315	21.4	1,843,077	124.3	20,076,647
Continuing <u>Existing</u> Costs														
Information Technology Staff	6.1	731,151	6.4	751,402	5.6	689,751	4.0	540,548	0.0	0	0.0	0	22.1	2,712,852
Other IT Costs		31,241		31,764		22,634		18,646		0		0		104,285
Total Continuing Existing IT Costs	6.1	762,392	6.4	783,166	5.6	712,385	4.0	559,194	0.0	0	0.0	0	22.1	2,817,137
Program Staff	53.3	3,617,487	65.3	4,246,624	65.3	4,246,624	153.6	9,099,542	153.6	9,099,542	153.6	9,099,542	644.7	39,409,361
Other Program Costs		1,268,680		1,452,281		1,417,695		2,518,604		2,518,604		2,518,604		11,694,468
Total Continuing Existing Program Costs	53.3	4,886,167	65.3	5,698,905	65.3	5,664,319	153.6	11,618,146	153.6	11,618,146	153.6	11,618,146	644.7	51,103,829
Total Continuing Existing Costs	59.4	5,648,559	71.7	6,482,071	70.9	6,376,704	157.6	12,177,340	153.6	11,618,146	153.6	11,618,146	666.8	53,920,966
TOTAL ALTERNATIVE COSTS	62.9	5,965,578	89.3	13,218,713	99.7	9,751,168	188.3	16,199,470	175.9	15,401,461	175.0	13,461,223	791.1	73,997,613
INCREASED REVENUES		0		17,641,000		17,641,000		72,361,000		72,361,000		72,361,000		252,365,000

Department: Franchise Tax Board ALTERNATIVE #2: Commercial

ALTERNATIVE #2: Commercial Off the Shelf (COTS) Solution

All costs are shown in whole (unrounded) dollars.

Date: 11/08/05

INCREASED REVENUES

Project: COD Expansion (05-01)

2005/06 FY 2006/07 FY 2007/08 FY 2008/09 FY 2009/10 FY 2010/11 TOTAL Amts PYs PYs Amts PYs Amts PYs Amts PYs Amts **PYs** Amts PYs Amts One-Time IT Project Costs Staff (Salaries & Benefits) 3.5 307,105 20.4 2,051,910 20.7 1,994,305 11.1 1,096,083 1.9 167,863 0.0 57.5 5,617,266 5.472 8,208 13,680 DGS Analyst 181,778 181,778 Hardware Purchase 0 0 0 0 0 0 2,595,305 0 Software Purchase/Ugrade 0 n 0 2,595,305 0 0 Telecommunications 0 0 0 Contract Services 0 3,469,376 Software Customization 976,980 4,045,888 164,382 8,656,626 0 Project Management 131,064 **Project Oversight** 0 218,440 262,129 262,129 873,762 0 **IV&V Services** 0 Other Contract Services 0 **TOTAL Contract Services** 1,195,420 4,176,952 3,731,505 426,511 9,530,388 Other 6,692 291,846 66,777 41,536 3,732 410,583 20.4 6,324,467 20.7 6,238,034 1.9 598,106 0.0 18,349,000 Total One-time IT Costs 3.5 319,269 11.1 4,869,124 57.5 Continuing IT Project Costs 1.2 Staff (Salaries & Benefits) 0.0 0 1.0 75.531 93.759 13.2 1,111,397 21.6 1,806,739 22.5 1,893,383 59.5 4,980,809 0 0 Hardware Lease/Maintenance 1,616 2,316 1,616 2,316 7,864 0 0 14,500 Software Maintenance/Licenses 14,500 14,500 14,500 0 0 Telecommunications 0 0 0 0 Contract Services 0 5,490 2,351 31,072 40,098 41,965 120,976 Other Total Continuing IT Costs 0.0 0 1.0 81,021 1.2 112,226 13.2 1,159,285 21.6 1,862,953 22.5 1,952,164 59.5 5,167,649 319,269 21.4 6,405,488 21.9 6,350,260 24.3 6,028,409 23.5 2,461,059 22.5 1,952,164 Total Project Costs 3.5 117.0 23,516,649 Continuing Existing Costs Information Technology Staff 731,151 751,223 5.6 689,751 4.0 540,548 0.0 0 0.0 22.1 2,712,673 6.1 6.4 Other IT Costs 31,241 31.724 22.634 18,646 0 104,245 Total Continuing Existing IT Costs 6.1 762,392 6.4 782,947 5.6 712,385 4.0 559,194 0.0 0 0.0 22.1 2,816,918 Program Staff 53.3 3,616,542 4,246,624 65.3 4,246,624 153.6 9,099,542 153.6 9,099,542 153.6 9,099,542 644.7 39,408,416 65.3 Other Program Costs 1,265,687 1,449,287 1,414,701 2,515,610 2,515,610 2,515,610 11,676,505 153.6 11,615,152 Total Continuing Existing Prog Costs 53.3 4,882,229 65.3 5,695,911 65.3 5,661,325 153.6 11,615,152 153.6 11,615,152 644.7 51,084,921 Total Continuing Existing Costs 59.4 5,644,621 71.7 6,478,858 70.9 6,373,710 157.6 12,174,346 153.6 11,615,152 153.6 11,615,152 53,901,839 666.8 TOTAL ALTERNATIVE COSTS 93.1 12,884,346 92.8 12,723,970 181.9 18,202,755 177.1 14,076,211 176.1 13,567,316 783.8 62.9 5,963,890 77,418,488

17,641,000

72,361,000

72,361,000

72,361,000

252,365,000

0

17,641,000

Department: Franchise Tax Board Project: COD Expansion (05-01)

Date: 11/08/05

FSR EAW

PROJECT FUNDING PLAN

All costs are shown in whole (unrounded) dollars

	FY	2005/06	FY	2006/07	FY	2007/08	FY	2008/09	FY	2009/10	FY	2010/11		TOTALS
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
TOTAL PROJECT COSTS	3.5	317,964	18.8	3,147,134	19.0	5,310,449	21.4	5,292,608	23.1	2,267,883	22.5	1,952,164	108.3	18,288,202
RESOURCES TO BE REDIRECTED														
Staff	3.5	314,316	0.7	67,754	1.3	110,722	3.3	300,908	7.4	590,428	7.3	590,329	23.5	1,974,457
Funds:														
Existing System		0		0		7,625		7,625		7,625		7,625		30,500
Other Fund Sources /1		3,648		0		0		0		0		0		3,648
TOTAL REDIRECTED RESOURCES	3.5	317,964	0.7	67,754	1.3	118,347	3.3	308,533	7.4	598,053	7.3	597,954	23.5	2,008,605
ADDITIONAL PROJECT FUNDING NEEDED														
One-Time Project Costs	0.0		17.1	2,998,359	16.7	5,106,228	7.3	4,045,855	1.2	390,095	0.0	0	42.3	12,540,537
Continuing Project Costs	0.0	0	1.0	81,021	1.0	85,874	10.8	938,220	14.5	1,279,735	15.2	1,354,210	42.5	3,739,060
TOTAL ADDITIONAL PROJECT FUNDS NEEDED BY FISCAL YEAR	0.0	0	18.1	3,079,380	17.7	5,192,102	18.1	4,984,075	15.7	1,669,830	15.2	1,354,210	84.8	16,279,597
TOTAL PROJECT FUNDING	3.5	317,964	18.8	3,147,134	19.0	5,310,449	21.4	5,292,608	23.1	2,267,883	22.5	1,952,164	108.2	18,288,202
Difference: Funding - Costs	0.0	0	0.0	0	(0.0)	0	0.0	0	0.0	0.0	0.0	0	(0.0)	0
Total Estimated Cost Savings	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0

/1 DGS Analyst for Procurement

Department: Franchise Tax Board

Project: COD Expansion (05-01)

Date: 11/08/05

FSR EAW

PROGRAM FUNDING PLAN

All costs are shown in whole (unrounded) dollars

	FY	2005/06	FY	2006/07	FY	2007/08	FY	2008/09	FY	2009/10	FY	2010/11	-	TOTALS
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
TOTAL PROGRAM COSTS	53.3	4,882,229	65.3	5,695,911	65.3	5,661,325	153.6	11,615,152	153.6	11,615,152	153.6	11,615,152	644.7	51,084,921
RESOURCES TO BE REDIRECTED														
Staff /1	53.3	4,882,229	53.8	4,927,516	53.8	4,927,516	53.7	4,927,516	53.8	4,927,516	53.8	4,927,516	322.2	29,519,809
Funds:														
Existing System		0		0		0		0		0		0		0
Other Fund Sources /2		0		0		0		5,000		5,000		5,000		15,000
TOTAL REDIRECTED RESOURCES	53.3	4,882,229	53.8	4,927,516	53.8	4,927,516	53.7	4,932,516	53.8	4,932,516	53.8	4,932,516	322.2	29,534,809
ADDITIONAL PROGRAM FUNDING NEEDED														
One-Time Program Costs	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Continuing Program Costs	0.0	0	11.5	768,395	11.5	733,809	99.9	6,682,636	99.8	6,682,636	99.8	6,682,636	322.5	21,550,112
TOTAL ADDITIONAL PROGRAM FUNDS NEEDED BY FISCAL YEAR	0.0	0	11.5	768,395	11.5	733,809	99.9	6,682,636	99.8	6,682,636	99.8	6,682,636	322.5	21,550,112
TOTAL PROGRAM FUNDING	53.3	4,882,229	65.3	5,695,911	65.3	5,661,325	153.6	11,615,152	153.6	11,615,152	153.6	11,615,152	644.7	51,084,921
Difference: Funding - Costs	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Total Estimated Cost Savings	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0

^{/1} Includes other program costs
/2 Funded by the department - Utilities for BSS's 3rd shift

ECONOMIC ANALYSIS SUMMARY

Department: Franchise Tax Board Project: COD Expansion (05-01)

Date: 11/08/05

All costs are shown in whole (unrounded) dollars.

FSR EAW														
	FY	2005/06	FY	2006/07	FY	2007/08	FY	2008/09	FY	2009/10	FY	2010/11	7	ΓΟΤΑL
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
EXISTING SYSTEM														
Total IT Costs	6.9	827,156	6.9	827,156	6.9	827,156	6.9	827,156	6.9	827,156	6.9	827,156	41.4	4,962,936
Total Program Costs	53.8	4,927,516	53.8	4,927,516	53.8	4,927,516	53.8	4,927,516	53.8	4,927,516	53.8	4,927,516	322.8	29,565,096
Total Existing System Costs	60.7	5,754,672	60.7	5,754,672	60.7	5,754,672	60.7	5,754,672	60.7	5,754,672	60.7	5,754,672	364.2	34,528,032
PROPOSED ALTERNATIVE	PROP	OSED ALTER	RNATI	/E: Develop	New C	OD System	(DB2, C	obol, Java)						
Total Project Costs	3.5	317,964	18.8	3,147,134	19.0	5,310,449	21.4	5,292,608	23.1	2,267,883	22.5	1,952,164	108.3	18,288,202
Total Cont. Exist. Costs	59.4	5,644,621	71.7	6,479,077	70.9	6,373,710	157.6	12,174,346	153.6	11,615,152	153.6	11,615,152	666.8	53,902,058
Total Alternative Costs	62.9	5,962,585	90.5	9,626,211	89.9	11,684,159	179.0	17,466,954	176.7	13,883,035	176.1	13,567,316	775.1	72,190,260
COST SAVINGS/AVOIDANCES	(2.2)	(207,913)	(29.8)	(3,871,539)	(29.2)	(5,929,487)	(118.3)	(11,712,282)	(116.0)	(8,128,363)	(115.4)	(7,812,644)	(410.9)	(37,662,228)
Increased Revenues		0		17,641,000		17,641,000		72,361,000		72,361,000		72,361,000		252,365,000
Net (Cost) or Benefit	(2.2)	(207,913)	(29.8)	13,769,461	(29.2)	11,711,513	(118.3)	60,648,718	(116.0)	64,232,637	(115.4)	64,548,356	(410.9)	214,702,772
Cum. Net (Cost) or Benefit	(2.2)	(207,913)	(32.0)	13,561,548	(61.2)	25,273,061	(179.5)	85,921,779	(295.5)	150,154,416	(410.9)	214,702,772		
ALTERNATIVE #1	ALTER	NATIVE #1:	Expar	nd/Re-write	Currer	nt COD (ADA	BAS) Sy	/stem	<u> </u>					
ALTERNATIVE #1 Total Project Costs	ALTER 3.5	NATIVE #1 : 317,019	Expar 17.6	nd/Re-write 6,736,642	Currer 28.8	at COD (ADA 3,374,464	BAS) Sy 30.7	ystem 4,022,130	22.3	3,783,315	21.4	1,843,077	124.3	20,076,647
									22.3 153.6	3,783,315 11,618,146	21.4 153.6	1,843,077 11,618,146	124.3 666.8	20,076,647 53,920,966
Total Project Costs	3.5	317,019	17.6	6,736,642	28.8	3,374,464	30.7	4,022,130						
Total Project Costs Total Cont. Exist. Costs	3.5 59.4	317,019 5,648,559	17.6 71.7 89.3	6,736,642 6,482,071	28.8 70.9	3,374,464 6,376,704 9,751,168	30.7 157.6 188.3	4,022,130 12,177,340	153.6 175.9	11,618,146	153.6 175.0	11,618,146	666.8 791.1	53,920,966
Total Project Costs Total Cont. Exist. Costs Total Alternative Costs	3.5 59.4 62.9	317,019 5,648,559 5,965,578	17.6 71.7 89.3	6,736,642 6,482,071 13,218,713	28.8 70.9 99.7	3,374,464 6,376,704 9,751,168	30.7 157.6 188.3	4,022,130 12,177,340 16,199,470	153.6 175.9	11,618,146 15,401,461	153.6 175.0	11,618,146 13,461,223	666.8 791.1	53,920,966 73,997,613
Total Project Costs Total Cont. Exist. Costs Total Alternative Costs COST SAVINGS/AVOIDANCES	3.5 59.4 62.9	317,019 5,648,559 5,965,578 (210,906) 0	17.6 71.7 89.3	6,736,642 6,482,071 13,218,713 (7,464,041) 17,641,000	28.8 70.9 99.7 (39.0)	3,374,464 6,376,704 9,751,168 (3,996,496)	30.7 157.6 188.3	4,022,130 12,177,340 16,199,470 (10,444,798) 72,361,000	153.6 175.9 (115.2)	11,618,146 15,401,461 (9,646,789) 72,361,000	153.6 175.0	11,618,146 13,461,223 (7,706,551)	666.8 791.1	53,920,966 73,997,613 (39,469,581)
Total Project Costs Total Cont. Exist. Costs Total Alternative Costs COST SAVINGS/AVOIDANCES Increased Revenues	3.5 59.4 62.9 (2.2)	317,019 5,648,559 5,965,578 (210,906) 0	17.6 71.7 89.3 (28.6)	6,736,642 6,482,071 13,218,713 (7,464,041) 17,641,000	28.8 70.9 99.7 (39.0)	3,374,464 6,376,704 9,751,168 (3,996,496) 17,641,000 13,644,504	30.7 157.6 188.3 (127.6)	4,022,130 12,177,340 16,199,470 (10,444,798) 72,361,000 61,916,202	153.6 175.9 (115.2)	11,618,146 15,401,461 (9,646,789) 72,361,000	153.6 175.0 (114.3) (114.3)	11,618,146 13,461,223 (7,706,551) 72,361,000	666.8 791.1 (426.9)	53,920,966 73,997,613 (39,469,581) 252,365,000
Total Project Costs Total Cont. Exist. Costs Total Alternative Costs COST SAVINGS/AVOIDANCES Increased Revenues Net (Cost) or Benefit	3.5 59.4 62.9 (2.2)	317,019 5,648,559 5,965,578 (210,906) 0 (210,906)	17.6 71.7 89.3 (28.6)	6,736,642 6,482,071 13,218,713 (7,464,041) 17,641,000 10,176,959	28.8 70.9 99.7 (39.0)	3,374,464 6,376,704 9,751,168 (3,996,496) 17,641,000 13,644,504	30.7 157.6 188.3 (127.6)	4,022,130 12,177,340 16,199,470 (10,444,798) 72,361,000 61,916,202	153.6 175.9 (115.2)	11,618,146 15,401,461 (9,646,789) 72,361,000 62,714,211	153.6 175.0 (114.3) (114.3)	11,618,146 13,461,223 (7,706,551) 72,361,000 64,654,449	666.8 791.1 (426.9)	53,920,966 73,997,613 (39,469,581) 252,365,000
Total Project Costs Total Cont. Exist. Costs Total Alternative Costs COST SAVINGS/AVOIDANCES Increased Revenues Net (Cost) or Benefit	3.5 59.4 62.9 (2.2) (2.2)	317,019 5,648,559 5,965,578 (210,906) 0 (210,906) (210,906)	17.6 71.7 89.3 (28.6) (28.6)	6,736,642 6,482,071 13,218,713 (7,464,041) 17,641,000 10,176,959	28.8 70.9 99.7 (39.0) (39.0) (69.8)	3,374,464 6,376,704 9,751,168 (3,996,496) 17,641,000 13,644,504 23,610,557	30.7 157.6 188.3 (127.6) (127.6) (197.4)	4,022,130 12,177,340 16,199,470 (10,444,798) 72,361,000 61,916,202	153.6 175.9 (115.2)	11,618,146 15,401,461 (9,646,789) 72,361,000 62,714,211	153.6 175.0 (114.3) (114.3)	11,618,146 13,461,223 (7,706,551) 72,361,000 64,654,449	666.8 791.1 (426.9)	53,920,966 73,997,613 (39,469,581) 252,365,000
Total Project Costs Total Cont. Exist. Costs Total Alternative Costs COST SAVINGS/AVOIDANCES Increased Revenues Net (Cost) or Benefit Cum. Net (Cost) or Benefit	3.5 59.4 62.9 (2.2) (2.2)	317,019 5,648,559 5,965,578 (210,906) 0 (210,906) (210,906)	17.6 71.7 89.3 (28.6) (28.6)	6,736,642 6,482,071 13,218,713 (7,464,041) 17,641,000 10,176,959 9,966,053	28.8 70.9 99.7 (39.0) (39.0) (69.8)	3,374,464 6,376,704 9,751,168 (3,996,496) 17,641,000 13,644,504 23,610,557	30.7 157.6 188.3 (127.6) (127.6) (197.4)	4,022,130 12,177,340 16,199,470 (10,444,798) 72,361,000 61,916,202	153.6 175.9 (115.2)	11,618,146 15,401,461 (9,646,789) 72,361,000 62,714,211	153.6 175.0 (114.3) (114.3)	11,618,146 13,461,223 (7,706,551) 72,361,000 64,654,449	666.8 791.1 (426.9)	53,920,966 73,997,613 (39,469,581) 252,365,000
Total Project Costs Total Cont. Exist. Costs Total Alternative Costs COST SAVINGS/AVOIDANCES Increased Revenues Net (Cost) or Benefit Cum. Net (Cost) or Benefit	3.5 59.4 62.9 (2.2) (2.2) (2.2)	317,019 5,648,559 5,965,578 (210,906) 0 (210,906) (210,906)	17.6 71.7 89.3 (28.6) (28.6) (30.8)	6,736,642 6,482,071 13,218,713 (7,464,041) 17,641,000 10,176,959 9,966,053	28.8 70.9 99.7 (39.0) (39.0) (69.8)	3,374,464 6,376,704 9,751,168 (3,996,496) 17,641,000 13,644,504 23,610,557 f (COTS) Sol	30.7 157.6 188.3 (127.6) (127.6) (197.4)	4,022,130 12,177,340 16,199,470 (10,444,798) 72,361,000 61,916,202 85,526,759	153.6 175.9 (115.2) (115.2) (312.6)	11,618,146 15,401,461 (9,646,789) 72,361,000 62,714,211 148,240,970	153.6 175.0 (114.3) (114.3) (426.9)	11,618,146 13,461,223 (7,706,551) 72,361,000 64,654,449 212,895,419	666.8 791.1 (426.9) (426.9)	53,920,966 73,997,613 (39,469,581) 252,365,000 212,895,419
Total Project Costs Total Cont. Exist. Costs Total Alternative Costs COST SAVINGS/AVOIDANCES Increased Revenues Net (Cost) or Benefit Cum. Net (Cost) or Benefit ALTERNATIVE #2 Total Project Costs	3.5 59.4 62.9 (2.2) (2.2) (2.2) ALTER 3.5	317,019 5,648,559 5,965,578 (210,906) 0 (210,906) (210,906) NATIVE #2:	17.6 71.7 89.3 (28.6) (28.6) (30.8)	6,736,642 6,482,071 13,218,713 (7,464,041) 17,641,000 10,176,959 9,966,053 hercial Off th 6,405,488 6,478,858	28.8 70.9 99.7 (39.0) (39.0) (69.8) ne Shell 21.9 65.3	3,374,464 6,376,704 9,751,168 (3,996,496) 17,641,000 13,644,504 23,610,557 f (COTS) So 6,350,260	30.7 157.6 188.3 (127.6) (127.6) (197.4)	4,022,130 12,177,340 16,199,470 (10,444,798) 72,361,000 61,916,202 85,526,759 6,028,409	153.6 175.9 (115.2) (115.2) (312.6)	11,618,146 15,401,461 (9,646,789) 72,361,000 62,714,211 148,240,970 2,461,059	153.6 175.0 (114.3) (114.3) (426.9)	11,618,146 13,461,223 (7,706,551) 72,361,000 64,654,449 212,895,419	666.8 791.1 (426.9) (426.9)	53,920,966 73,997,613 (39,469,581) 252,365,000 212,895,419 23,516,649
Total Project Costs Total Cont. Exist. Costs Total Alternative Costs COST SAVINGS/AVOIDANCES Increased Revenues Net (Cost) or Benefit Cum. Net (Cost) or Benefit ALTERNATIVE #2 Total Project Costs Total Cont. Exist. Costs	3.5 59.4 62.9 (2.2) (2.2) (2.2) ALTER 3.5 53.3	317,019 5,648,559 5,965,578 (210,906) 0 (210,906) (210,906) NATIVE #2: 319,269 5,644,621	17.6 71.7 89.3 (28.6) (28.6) (30.8) E Comn 21.4 65.3 93.1	6,736,642 6,482,071 13,218,713 (7,464,041) 17,641,000 10,176,959 9,966,053 hercial Off th 6,405,488 6,478,858	28.8 70.9 99.7 (39.0) (69.8) (69.8) 21.9 65.3 92.8	3,374,464 6,376,704 9,751,168 (3,996,496) 17,641,000 13,644,504 23,610,557 f (COTS) So 6,350,260 6,373,710 12,723,970	30.7 157.6 188.3 (127.6) (127.6) (197.4) ution 24.3 153.6 181.9	4,022,130 12,177,340 16,199,470 (10,444,798) 72,361,000 61,916,202 85,526,759 6,028,409 12,174,346	153.6 175.9 (115.2) (115.2) (312.6) 23.5 153.6 177.1	11,618,146 15,401,461 (9,646,789) 72,361,000 62,714,211 148,240,970 2,461,059 11,615,152 14,076,211	153.6 175.0 (114.3) (114.3) (426.9) 22.5 153.6 176.1	11,618,146 13,461,223 (7,706,551) 72,361,000 64,654,449 212,895,419 1,952,164 11,615,152	117.0 644.7 783.8	53,920,966 73,997,613 (39,469,581) 252,365,000 212,895,419 23,516,649 53,901,839
Total Project Costs Total Cont. Exist. Costs Total Alternative Costs COST SAVINGS/AVOIDANCES Increased Revenues Net (Cost) or Benefit Cum. Net (Cost) or Benefit ALTERNATIVE #2 Total Project Costs Total Cont. Exist. Costs Total Alternative Costs	3.5 59.4 62.9 (2.2) (2.2) (2.2) ALTER 3.5 53.3 62.9	317,019 5,648,559 5,965,578 (210,906) (210,906) (210,906) NATIVE #2: 319,269 5,644,621 5,963,890	17.6 71.7 89.3 (28.6) (28.6) (30.8) E Comn 21.4 65.3 93.1	6,736,642 6,482,071 13,218,713 (7,464,041) 17,641,000 10,176,959 9,966,053 hercial Off th 6,405,488 6,478,858 12,884,346	28.8 70.9 99.7 (39.0) (69.8) (69.8) 21.9 65.3 92.8	3,374,464 6,376,704 9,751,168 (3,996,496) 17,641,000 13,644,504 23,610,557 f (COTS) So 6,350,260 6,373,710 12,723,970	30.7 157.6 188.3 (127.6) (127.6) (197.4) ution 24.3 153.6 181.9	4,022,130 12,177,340 16,199,470 (10,444,798) 72,361,000 61,916,202 85,526,759 6,028,409 12,174,346 18,202,755	153.6 175.9 (115.2) (115.2) (312.6) 23.5 153.6 177.1	11,618,146 15,401,461 (9,646,789) 72,361,000 62,714,211 148,240,970 2,461,059 11,615,152 14,076,211	153.6 175.0 (114.3) (114.3) (426.9) 22.5 153.6 176.1	11,618,146 13,461,223 (7,706,551) 72,361,000 64,654,449 212,895,419 1,952,164 11,615,152 13,567,316	117.0 644.7 783.8	53,920,966 73,997,613 (39,469,581) 252,365,000 212,895,419 23,516,649 53,901,839 77,418,488
Total Project Costs Total Cont. Exist. Costs Total Alternative Costs COST SAVINGS/AVOIDANCES Increased Revenues Net (Cost) or Benefit Cum. Net (Cost) or Benefit ALTERNATIVE #2 Total Project Costs Total Cont. Exist. Costs Total Alternative Costs COST SAVINGS/AVOIDANCES	3.5 59.4 62.9 (2.2) (2.2) (2.2) ALTER 3.5 53.3 62.9	317,019 5,648,559 5,965,578 (210,906) 0 (210,906) (210,906) NATIVE #2: 319,269 5,644,621 5,963,890 (209,218) 0	17.6 71.7 89.3 (28.6) (28.6) (30.8) • Comn 21.4 65.3 93.1 (32.4)	6,736,642 6,482,071 13,218,713 (7,464,041) 17,641,000 10,176,959 9,966,053 hercial Off the 6,405,488 6,478,858 12,884,346 (7,129,674)	28.8 70.9 99.7 (39.0) (69.8) ne Shel 21.9 65.3 92.8 (32.1)	3,374,464 6,376,704 9,751,168 (3,996,496) 17,641,000 13,644,504 23,610,557 f (COTS) Sol 6,350,260 6,373,710 12,723,970 (6,969,298) 17,641,000	30.7 157.6 188.3 (127.6) (127.6) (197.4) ution 24.3 153.6 181.9	4,022,130 12,177,340 16,199,470 (10,444,798) 72,361,000 61,916,202 85,526,759 6,028,409 12,174,346 18,202,755 (12,448,083) 72,361,000	153.6 175.9 (115.2) (115.2) (312.6) 23.5 153.6 177.1 (116.4)	11,618,146 15,401,461 (9,646,789) 72,361,000 62,714,211 148,240,970 2,461,059 11,615,152 14,076,211 (8,321,539) 72,361,000	153.6 175.0 (114.3) (114.3) (426.9) 22.5 153.6 176.1	11,618,146 13,461,223 (7,706,551) 72,361,000 64,654,449 212,895,419 1,952,164 11,615,152 13,567,316 (7,812,644) 72,361,000	117.0 644.7 783.8	53,920,966 73,997,613 (39,469,581) 252,365,000 212,895,419 23,516,649 53,901,839 77,418,488 (42,890,456)